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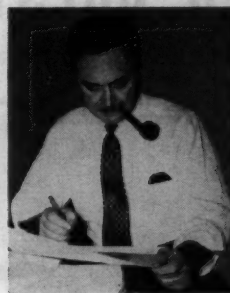
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On the Line—



Farewell to Forgotten Men

SOME executives maintain that "forgotten men" in industry are a necessary evil. But here's one who plans to yank them out of their cozy ruts, thanks to an ambitious lad.

In the traffic department of a major industrial plant, there are three people classified as rate clerks. One has been there 14 years, another nine, and "junior" only three.

Last year, junior developed that dead-end complex common to ambitious young men after a few years on any staff job. He tried all the tricks in the book to get more money, a fancy title, and so on.

Well, sir, last July he went job-hunting on his vacation, blithely unaware that the traffic manager recognized the symptoms and was prepared for the outcome: Resignation; dissatisfaction with his job if the hunt proved unsuccessful; or a shift into the job security attitude, which usually leads a man into mediocrity—the realm of forgotten men.

But junior pulled a switch on his boss with a new twist.

He made a few job contacts that looked pretty good. However, the contacts made him realize that he was impatient with his progress; that to succeed in a better job, he would need more experience; and that, on a new job, he would have to go through a probationary and "learn the ropes" period.

After a week of interviews, he decided that his strength lay in the three years he put into his present job; that an increase in salary was but a matter of time and personal improvement; and that the road to improvement was further mastery of his job—but just how, he wasn't sure.

He spent the second week of his vacation calling on his firm's distribution centers, customers, and transportation organizations. He asked many questions but the principal ones were, "How can we serve you better?" and its opposite, "How can you serve us better?"

He came back to his job loaded with ideas; all sound, all since adopted. One of these ideas cut his company's distribution costs by \$36,000 these last 12 months.

Junior still is classified as a rate clerk—of a special sort, with a financial status of assistant traffic manager.

The other two rate clerks still are doing the same things, the same old way—but not for long.

The traffic manager plans to have all of his staff make periodic tours of the company's plants and sales offices. They will watch their freight being handled and follow it to its destination. They will visit distribution centers and see warehousemen in action.

They will have every opportunity to lose their "forgotten men" status. They and their company stand to gain.

Yakkety Yak

A man is known by the company he keeps; a company by the men it keeps.

... DEFINITION — Forgotten Man: Colorless matter in male attire.

... Quote: "He's so dull nobody even hates him."

STEEL: Construction has replaced the automotive industry as the major steel consumer.

SHIPS: U. S. Ownership of world's ocean-going tanker carrying capacity is down from 60 per cent, at end of World War II, to 26 per cent. Cause: Big foreign tank building activity.

RUSSKI YAKSKI—Now it's the helicopter: On July 12, Radio Moscow "observed" the 200th anniversary of one Lomonosov's first successful helicopter flight. His motive power? Raw vodka on a lost weekend, we guess.

GEMS from "Cultural Habits of Eating," by Nikolai Smirnov, Russki Emily Post:

... "Eating in a cap is unhygienic; it increases the flow of blood to the face.

... "Bread usually is taken with a clean fork, not with an unhygienic hand.

... "Fruit is raised to the mouth with (unhygienic?) fingers; never with a knife."

Al. Greene

Editor

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LETTERS

TO THE EDITOR

Pallet Vault Storage

To The Editor:

We are interested in securing one or two reprints of the article contained in your issue dated December, 1953, entitled "Pallet Vault Makes Household Goods Handling History." We are contemplating some adaption of the procedure in our storage operation and found your article on the subject very enlightening.

E. W. Schumacher

Von Der Ahe Van & Storage
Oakland, California

Additional copies of the December, 1953, issue of DISTRIBUTION AGE are available on request.—Ed.

Beef Storage

To The Editor:

We are at the present time confronted with a problem concerning shortages of fresh, frozen beef quarters placed in refrigerated storage. This product, having arrived in large quantities, was according to the warehouse, not adequately checked on arrival due to their inability to cope with the quantity involved. The discrepancy between the non-negotiable warehouse receipts as issued by the warehouse and their delivery receipts amounts to approximately 146 pieces with a total value of better than \$2,000.

We filed formal claim against the warehouse for the shortage involved, and they have advised that they do not consider themselves liable for this shortage due to the manner in which it was received (quantity), and have declined any liability with regard to this claim. Our contention has been that they are liable for delivery of any product on which they issued warehouse receipts.

Would appreciate your advising what, in your opinion, the legal aspects are insofar as a case of this type is concerned. The warehouse in question is located in Massachusetts.

D. L. Fant

General Traffic Department
International Packers Limited
Chicago 3, Illinois

The receipts in controversy are non-negotiable. If, in this case, the warehouseman had issued negotiable warehouse receipts he would be liable to a holder in due course irrespective of errors with respect to quantity of merchandise received for storage.

First, all higher courts agree that a warehouseman cannot be liable for delivering merchandise to the holder of a non-negotiable warehouse receipt, although such receipt is not at time

(Please Turn to Page 94)

Chuting the NEWS

Coming Events

- Aug. 1-3—Movers' Conference of America and 54 Affiliated Movers Assn., Annual Assembly, Statler Hotel, Boston, Mass.
- Aug. 17-19—5th Western Packaging & Materials Handling Exposition, San Francisco, Cal.
- Aug. 19-21—3rd Annual NFWA Controllers, Engineering & Operations Conference, Shoreland Hotel, Chicago, Ill.
- Sept. 12-15—10th Annual Meeting National Truck Leasing System, Bismarck Hotel, Chicago, Ill.
- Sept. 13-14—New England Shippers Advisory Board, Poland Spring, Me.
- Sept. 15-16—Southeast Shippers Advisory Board, Chattanooga, Tenn.
- Sept. 16-17—Pacific Northwest Advisory Board, Spokane, Wash.
- Sept. 21—Southwestern Industrial Traffic League, Waco, Tex.
- Sept. 21-22—Great Lakes Regional Advisory Board, Mansfield, Ohio.
- Sept. 21-23—Southwest Shippers Advisory Board, Waco, Tex.
- Sept. 27-29—Associated Traffic Clubs of America, 31st Annual Meeting, Louisville, Ky.
- Sept. 28-30—9th National Industrial Packaging & Materials Handling Exposition & Annual Technical Short Course, Chicago, Ill.
- Sept. 29-30—Atlantic States Shippers Advisory Board, Rochester, N. Y.
- Oct. 12-14—National Assn. of Shippers Advisory Boards, Louisville, Ky.
- Oct. 13-15—Southwest Warehouse & Transfermen's Assn., Plaza Hotel, San Antonio, Tex.
- Oct. 18-22—42nd National Safety Congress & Exposition, Chicago.
- Oct. 24-27—Annual Convention National Defense Transportation Assn., Pittsburgh, Pa.
- Oct. 25-29—American Assn. of Port Authorities, 43rd Annual Convention, San Francisco, Cal.
- Oct. 29—Annual Meeting, American Society of Traffic and Transportation, Washington, D. C.
- Nov. 8—National Assn. of Railroad & Utilities Commissioners, Annual Convention, Chicago, Ill.
- Nov. 8-10—Central Western Shippers Advisory Board, Lincoln, Neb.
- Nov. 10-12—18th National Time & Motion Study & Management Clinic, Hotel Sherman, Chicago, Ill.
- Nov. 15-18—International Soft Drink Industry Exposition, Convention Hall, Philadelphia, Pa.
- Nov. 29-Dec. 6—1st International Automation Exposition, 242nd Coast Artillery Armory, New York, N. Y.

AWA Testifies in Support of HR-8832, Claims Government-Run Warehouses Are Uneconomical

The Federal Government is the largest warehouse operator in the world, operating upwards of 560 million sq ft of refrigerated and merchandise warehouse space, according to testimony given by the American Warehousemen's Association before the House Committee on Government Operations on July 15.

The association was testifying in support of HR 8832 which would create an "anti-Government competition board" to eliminate Federal competition with business-type activities.

AWA told the committee that its industry operates 165 million sq ft of storage space, well distributed across the country to provide storage for all types and classes of general merchandise and perishable products. It pointed out that

these warehouses are currently operating at 70-75 per cent capacity.

AWA pointed out to the committee that it believed a large part of the storage activity being performed by the Government could be done at less cost by privately operated warehouse without impairing Government efficiency. The Federal income tax loss alone, the association conservatively estimated, amounts to \$56,000,000 annually.

The association further declared that actual cost computing in government warehousing operations is unrealistic and does not include all elements of cost which private warehousemen are obligated to include when determining their costs. It recommended a full investigation of government costs by certified accountants.

NFWA Conference

The 3rd Annual National Furniture Warehousemen's Assn. Controllers, Engineering and Operations Conference will be conducted August 19-21, in Chicago. The Shoreland Hotel will serve as Conference headquarters.

A 6-week campaign to double the present membership of the Customer Relations Council of the ATA has been inaugurated under the leadership of E. G. Lackey, Winston-Salem, N. C., Council chairman.

(Please Turn Page)

Railroad Revenue Freight Car Loading

	1954	1953	1952	1951
January.....	(5 wks.) 2,967,321	3,351,041	3,561,719	3,660,523
February.....	(4 wks.) 2,461,745	2,730,301	2,911,090	2,834,472
March.....	(4 wks.) 2,411,835	2,801,445	2,867,583	2,998,963
April.....	(4 wks.) 2,445,157	2,957,068	2,912,199	3,152,196
May.....	(5 wks.) 3,344,719	3,853,088	3,677,596	3,977,393
June.....	(4 wks.) 2,730,266	3,253,942	2,805,738	3,294,766
July.....	(4 wks.)	2,963,805	2,236,068	2,993,321
August.....	(5 wks.)	4,022,382	3,882,069	4,120,219
September.....	(4 wks.)	3,153,226	3,383,834	3,311,846
October.....	(5 wks.)	4,024,439	4,156,014	4,316,505
November.....	(4 wks.)	2,796,888	3,139,489	3,138,884
December.....	(4 wks.)	2,413,396	2,671,756	2,700,994
Total.....	18,361,043	38,302,762	37,985,155	40,499,182

Chuting the News . . .

(Continued from Preceding Page)

President Establishes Transport Committee On Cabinet Level, Orders Complete Study

President Eisenhower last week asked Secretary of Commerce Sinclair Weeks to head a cabinet committee on transport policy. Observers feel that the president's move indicates his dissatisfaction with results of piecemeal surveys of various segments of the industry.

The new committee has until Dec. 1 to study and report to the president on the consistency of federal policies relating to the transportation industry. The group

has been instructed to make a thorough review of transport problems, and the government structures to meet the problems.

Aiding Mr. Weeks as committee members are Defense Secretary Wilson and Defense Mobilizer Flemming. Participating on a temporary basis will be Treasury Secretary Humphrey, Postmaster General Summerfield, Agriculture Secretary Benson, and Budget Director Hughes.

—DA—

LCL Routing Guide

After a thorough study of the need for a consolidated LCL Guide for the use of Kansas City shippers, the Chamber of Commerce of Kansas City Transportation Department has concluded that the issuance of such a guide will be of considerable benefit. Accordingly, the group voted to go ahead immediately with the preparation of a guide.

Handling Tour



James Connell, sales manager, Allied Van Lines, explains packing techniques to members of the Danish external materials handling team who visited the headquarters of Allied Van Lines, Broadview, Ill. Watching the demonstrations are (l. to r.): Frederik A. Olsen, director, F. A. Olsen Trucking Co., and vice-president, Association of Danish Carriers; and Svend Syndberg, director, S. Syndberg Trucking Co., Bellerup



Herman T. Pott (left) of St. Louis, hands Secretary of Commerce Sinclair Weeks a check for \$781,500 covering the first installment and interest due on the sale of the government-owned Inland Waterways Corp. Pott is chairman of the board of Federal Barge Lines, Inc., which a year ago purchased the waterway facilities for \$9 million

—DA—

Considerable activity by state legislatures to bring their motor vehicle laws into closer conformity with Acts IV and V of the Uniform Vehicle Code is revealed in a survey by the National Highway Users Conference.

—DA—

ICC Lifts Suspension On Piggy-Back Tariffs

The Interstate Commerce Commission, by order dated July 9, vacated its order of June 14 which suspended the operation of railroad schedules publishing rates for and establishing trailer-on-flat-car service by six roads. Investigation of the tariffs in question will continue.

The PRR, DI&W, Erie, and Nickel Plate immediately filed supplements making their tariffs effective July 12. The B&O filed its supplement to be effective July 20.

As an aftermath of the action, both the PRR and B&O announced definite piggy-back plans. The PRR announced July 12 that the service has been inaugurated between New York, Philadelphia, Pittsburgh, and Chicago.

The B&O began operation July 20. The plan includes piggy-back between Philadelphia and Baltimore, Pittsburgh and Chicago, and Cincinnati and St. Louis.

Freight Carloading Down

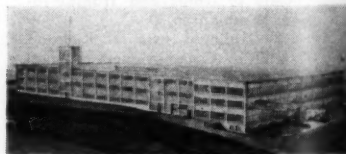
Freight carloadings in the third quarter are expected to be 8.6 per cent below those in the same period of 1953, according to estimates compiled by the 13 Regional Shipper Advisory Boards. On the basis of these estimates, carloadings of the 32 principal commodity groups will be 7,334,436, compared to 8,022,924 actual carloadings in the third quarter last year.

—DA—

Warehouse Economies

Examples in grocery distribution where warehousing costs had been cut from more than 4 per cent of sales to less than 5/8 of 1 per cent of sales were cited by William H. Meserole, Philadelphia warehouse consultant, before the annual convention of the American Marketing Association held last month.

Rubber Warehouse



This is the architect's drawing of the United States Rubber Co.'s new, modern 3-story warehouse and office building, which will be erected in Naugatuck, Conn. The new building, planned for occupancy the spring of 1955, will be 425 ft long, 200 ft wide



The above photograph was taken at the recent installation of officers of the Traffic Club of Houston. Left to right are: Cecil H. Hull, Jr., works traffic manager, Diamond Alkali Co., second vice president; A. J. Husmann, traffic manager, Kirby Lumber Corp., president, and Andy L. Shine, general agent, Frisco Lines, first vice president of the group

Piggy-Back Protest

A petition filed by the Regular Common Carrier Conference and the Pacific Inland Tariff Bureau, Inc., of Portland, Ore., now before the ICC requests the suspension of a tariff for trailer-on-flatcar service filed by the Union Pacific Railroad Co., to become effective July 15, 1954.

Truckers Battle Statistics

"Reporting of motor freight commodity statistics to the ICC, as requested in a petition filed by the railroads on May 19, would impose an additional burden on the motor carrier without indication of any real need for such information," the trucking industry stated July 15 in a brief filed with ICC by the ATA and the National Traffic Committee.

Show Scene



New concepts in materials handling and packaging will be displayed and discussed at the 5th Western Packaging and Materials Handling Exposition scheduled for Aug. 17-19 in San Francisco's Civic Auditorium

1954 Movers' Assembly Aug. 1-3 in Boston; Mitchell, Clarke, Knudson Listed as Speakers

The 1954 Movers' Assembly, sponsored by the Movers' Conference of America, will be conducted Aug. 1-3 in Boston's Statler Hotel. A full slate of speakers and panel discussions covering topics of importance to the industry has been announced.

Principal speakers will include: Richard F. Mitchell, ICC chairman; Owen Clarke, ICC commissioner and administrator of the Defense Transport Administra-

tion; James K. Knudson, former commissioner; Jack Cole, ATA president; George Winkler, Jr., NFWA president; William T. Middelberg, of Philadelphia; Francis L. Wyche, MCA traffic director, and Thomas R. Kingsley, MCA research director.

Panel discussions scheduled include: Safety in the Moving Industry, Shipper Relations, Reciprocity, and a special panel conducted by the women members.

News Briefs

There were 1,359 vessels of 1,000 gross tons and over in the active oceangoing U. S. merchant fleet on July 1. This represents 153 vessels less than the active fleet a year ago.

... A contribution of \$100,000 to the ATA Foundation program for the second year from the Fruehauf Trailer Co. has been announced.

... Foreign trade general cargo tonnage through the Customs District of New York in 1953 totaled 11,916,960 long tons, a decline of 6 per cent from the 1952 figure.

... A war-risk insurance program to cover cargo has been prepared by the Maritime Administration, and will be held in a stand-by status for use in the event of hostilities.

... Trailmobile truck-trailers hereafter will be designed by the men who own and operate them, under the terms of a Customer Individualized Design program adopted by the company.

... A group of 13 West Coast steamship conferences this week submitted a plea to the attorney general's National Committee to Study the Anti-Trust Laws, placing before the committee "certain practical and legal considerations which ... warrant a review of the recent position of the Department of Justice directed against the so-called contract rate system."

Highway Legislation

A bill to withhold Federal-aid highway funds from states imposing ton-mile, axle-mile, and similar third-structure highway use taxes was introduced in the House of Representatives last month by Rep. Charles G. Oakman (R., Mich.). The bill provides that the amount of Federal-aid funds withheld from such states would be equal to the amount those states obtain from third-structure taxes.

The Senate on July 13 agreed to withdraw the motion to reconsider the vote by which the so-called Time Lag Bill, S-1461, was recommitted to the Committee on Interstate and Foreign Commerce.

(Please Turn Page)

Long-Reach Wool Clamps



Installation of unusual pronged clamps on fork trucks at a Rhode Island textile mill meant the direct saving of \$160 per week per truck, and the elimination of a messy handling problem. Originally purchased for general warehouse work, the Jeeps fitted with attachments handle the wool more efficiently with better results than previous method. Annual savings amount to \$8,320 per truck

Transport Growth

Transport growth industries—airlines, barge lines, and petroleum pipe lines—continued to establish new records in volume of traffic handled despite the general dip in the nation's economy during the first half of 1954, according to the Chamber of Commerce of the United States, in its mid-year "Transport Review and Outlook."

Chuting the News . . .

(Continued from Preceding Page)

SIPMHE and University of Illinois Announce Packaging and Materials Handling Short Course

The Society of Industrial Packaging and Materials Handling Engineers and the University of Illinois, co-sponsors of the Packaging and Materials Handling Short Course, have released the 1954 educational program.

The Short Course will be presented in Chicago, Ill., Sept. 27-30, as part of the 3-feature event which will highlight the annual National Meeting of SIPMHE.

Beginning one day earlier than

the 9th National Industrial Packaging and Materials Handling Exposition, the Short Course will be conducted in the Congress Hotel. The Exposition and competition will take place at the Chicago Coliseum.

This year's Short Course program, consisting of 17 daily sessions, will be divided into three sections: Packaging Fundamentals, Materials Handling Fundamentals, and Special Management.

Traffic Committee Meets

At the National Traffic Committee's third meeting of the 1953-54 term, the NTC counsel was instructed to stand firm in that the Committee's Section 5(a) application as presently constituted is in furtherance of the National Transportation Policy. Recommended was the immediate filing of a petition for reconsideration of the ICC's Div. 2 disapproval of the pact.

—DA—

Roy Fruehauf, president of Fruehauf Trailer Co., was cited as "the person having done most for trucking and transportation during the past year" at the recent National Truck, Trailer and Equipment Show, in Los Angeles, Cal.

MEN in the NEWS

Materials Handling

C. E. Mathews—appointed Dallas (Tex.) Divisional manager, Gould National Batteries, Inc.

Elbert Lively—named chairman of the Board, Elbert Lively & Co., New York. George Coombe—president and chief engineer.

Floyd M. Mayse appointed South-eastern district manager, Lamson Mobilift Corp., with headquarters in Atlanta, Ga.



L. L. Reed—named general manager, Albion, Mich., and Somerville, Mass., plants of Colson Corp.

Wilton G. Smith—new manager of the New York export office, Hyster Co.

Packing & Packaging

Frank J. Sullivan—named manager, Ohio Corrugated Box Div., Robert Gair Co., with headquarters in Cleveland.

George H. Kubes — re-elected president and director, American Box Co., Cleveland, O.



James A. Mundie—appointed sales supervisor, New Orleans (La.) plant, Fulton Bag & Cotton Mills.

Traffic

John Drummond—named traffic manager, Perkins Products, Chicago, succeeding F. L. Michener, retired.



Robert V. Peabody—new general traffic manager, Smith-Douglass Co., Norfolk, Va.

James M. Craig—new general traffic manager, Reliance Mfg. Co., New York, N. Y.

Harry E. Seel—promoted to director of traffic, Olin Industries, Inc., East Alton, Ill.

R. M. Pilson, traffic manager, Anchor Post Products, Inc.—re-elected president, Industrial Traffic Managers Assn. of Baltimore.

Kenneth H. Jamieson — new general traffic manager, Eastman Kodak Co., Rochester, N. Y.



R. C. Berrey—elected vice president in charge of traffic, United States Gypsum Co., E. J. Wahl — named supervisor of motor rates and service.

James R. Sprung—joined Interstate Traffic Adjustment Co., Marshall, N. C.

Michael J. Page—appointed traffic manager, Mastic Tile Corp. of America, Newburgh, N. Y.

W. S. Karstens—new traffic manager, Cappell, MacDonald Co., Dayton, O.

Eugene A. Nowacki, Pure Oil Co.—

installed as president of Chicago Chapter No. 40, Delta Nu Alpha.

J. Milton Connors — promoted to western division traffic manager, Tide Water Associated Co., San Francisco, Cal.

Transportation—Air

Curt Crowell — appointed traffic manager, Air Express International.

Henry H. Burke—elected vice president in charge of service and supply, Pan American World Airways.

Highway

Jack McConnell—retired as assistant sales manager after 23 years with Consolidated Freightways, Inc., Portland, Ore.

George M. Bunn—joined Kentucky Mfg. Co., Louisville, Ky., as Eastern representative.

William A. Breshnahan—appointed assistant general manager and director of interstate cooperation by the American Trucking Associations, Inc. ATA also named Edward D. Hicks, Jr., assistant director of the Field Service Dept., and Oscar Lloyd Davis public relations field representative in the Midwest.



Harry L. White —appointed sales manager, Autocar Div., White Motor Co., Exton, Pa.

J. N. Johnson, president, Johnson Motor Lines, Charlotte, N. C.—died of a heart attack in Miami, Fla., June 23. He also was president of Equipment Leasing Co., Atlanta, Ga., and

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Washington

DA

By Ray M. Stroupe, *Chilton Washington News Bureau*

Price Props

Flexible price supports for farm-grown items received the backing of the National Assn. of Refrigerated Warehouses before Congress put these measures to a vote. Warehouse operators emphasize that they get direct benefits from rigid price props, under which vast amounts of perishable foods must be put in storage. Nevertheless, they have advocated adoption of flexible supports as more beneficial to the overall economy.

Carriers' Status

Trucking companies and inland waterway carriers are doing business at a rate the railroads can envy, a U. S. Chamber of Commerce study indicates. In a mid-1954 survey of distribution activities, the organization found highway carriers having their second best year. Barge lines, with a record volume of freight traffic, are anticipating a total of at least 75 billion ton-miles. At the same time, railroad carloadings, freight, and passenger traffic are down.

Poor Prospects

Orders for new freight cars are too scanty to permit car builders to make up, by the end of this year, the 82,000-unit deficiency in the current rolling stock goal set by the government. That is the outlook recently given to U. S. Commerce Dept. by the American Railway Car Institute. Total backlog of car orders has dropped about 50 per cent since Jan. 1, and reduced workloads have resulted in shutdowns of several builders' shops.

Terminal Data

Companies interested in use of port and terminal installations at Tacoma, Grays Harbor, and Olympia, Wash., will find helpful data in a new Army publication. This report, known as No. 35 in the Port Series, includes chapters on terminal charges, port facilities and services, volume and flow of commerce into and out of the three cities. It is sold by Government Printing Office, Washington, D. C., at \$2 per copy.

Building Activity

Private builders are realizing the investment value of commercial storage structures, new government figures on construction activity indicate. In the first half of 1954, privately-built warehouses and loft and office buildings valued at \$435 million were started. This total is more than 40 per cent above the \$309 million figure for the corresponding period last year.

Space Reduction

Storage and distribution of field rations for issue to all U. S. military forces probably will become a more economical operation soon. A new Standard B Ration made up of 111 canned, dehydrated, and other types of non-perishable food items has just received Defense Dept. approval. Now expected is a five per cent reduction in cubic shipping space, compared with that required for B rations previously stocked.

Sales Outlook

Way may be opening soon for sale of materials handling equipment to the Defense Dept. under a special \$100 million authorization voted by Congress. The sum is for production machinery and apparatus needed in performance of military contracts. Under this definition, conveyor systems, cranes, and related items may qualify for purchase. Defense Dept. will take its time—perhaps months—before awarding contracts on the basis of this authorization.

Highway Boom

Suppliers of road-building and bridging equipment have a sizable stake in the stepped-up program of federal aid to the states for highway construction. U. S. Commerce Secretary Weeks touched off the action by his early disclosure of the individual states' shares of government money. He foresees a growing demand for the equipment that will be utilized in updating the national system of highways and secondary roads.

Packaging Practices

Distributors of steel pipe couplings can provide U. S. Commerce Dept. with needed advice on packaging practices. The department is proposing a simplified schedule of standard quantities per unit package for couplings (standard and line, black or galvanized) in sizes from 1/8 in. to 2 in. Officials want to learn how businessmen, including producers and distributors, view this proposal.

Tax Allowances

Welcome news for producers of materials handling equipment is a provision in the omnibus tax reform bill to liberalize depreciation allowances and thus encourage expansion. It permits a producer who buys a piece of machinery with an expected useful life of 10 years to write off about 67 per cent of the cost in the first five years. Customary practice of previous years was to spread the allowances over the full life of the item in equal amounts.

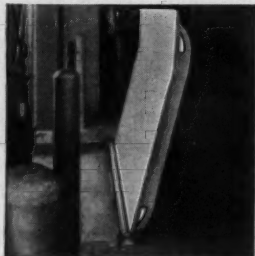
***PRODUCTIONIZE* THE LOADING DOCK!**

CUT DOWN TRAILER LOADING TIME AND INCREASE DOCK HANDLING CAPACITY—AS THESE LEADING FREIGHT CARRIERS HAVE DONE!

Associated Truck Lines INSTALL MAGLINER Dock Boards!



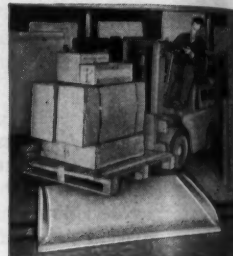
Loading doors with battery of Magliner dock boards in "raised" position. Lightness, low initial cost, automatic self-adjustment, and absence of maintenance were among the reasons this Magliner permanent installation was specified at Associated.



Close-up of installation showing recess and hinge construction. The use of dry babbitt bearings permits simplified manual operations . . . eliminates all maintenance problems!

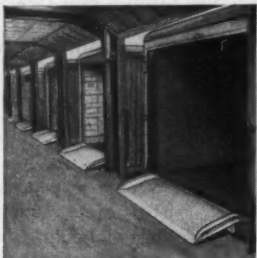


Boards are constructed of heavy duty, lightweight magnesium. Over 5 feet wide, the units are easily raised or lowered by one man . . . No counter balances or costly leveling devices of any kind are required.



To facilitate tight turns, all Magliner dock boards are equipped with special double-tapered, wide-radius curb ends. Magliner boards have cut down on loading time and have increased handling capacity at Associated. They can do the same for your operation.

Doyle Freight Lines SAVE MONEY with Magliner Dock Boards!



This busy Doyle Freight Terminal has installed Magliner Dock Boards at every station. Custom-engineered for the requirements of this specific dock, Magliners smooth the flow of loading traffic, save valuable man hours.



Magliner Dock Boards fully meet all load and equipment requirements at Doyle Freight Lines—provide needed insurance for safe, dependable and economical long-life service.



Beveled edges (maximum 10° slope) facilitate movement of valuable loads on and off the dock board, avoiding hazardous load jar . . . eliminating equipment damage and load loss. Edges bear snugly against dock and carrier to accommodate varying height differences.



Narrow aisles are a problem on this busy dock, and equipment turns must be made in cramped quarters. There is no difficulty here, because this Magliner flared dock board permits maximum maneuverability—most of the turn can be made on the board itself.

You, too, can PRODUCTION-IZE the Loading Dock

Associated Truck Lines and Doyle Freight Lines are not isolated cases. Many other leading carriers and shippers have installed Magliner Dock Boards. They too have found that Magliner offers *all* the important dock board advantages. Here are some of the many features which only Magliner offers: Tire-Saver Safety Curbs—prevent power truck tire

damage. Triple-Strength Curbs—don't break loose even under continuous daily abuse. Fully-adjustable Drop Lock—quickly adjusts to any height or span—automatically locks truck dock boards in position. You too can production-ize your loading dock with lightweight, (One-Man) Magliner magnesium Dock Boards. It will pay you to get the facts.

Write Today for Your Copy of Bulletin DB-204



Canadian Factory:
MAGLINE OF CANADA LIMITED
RENFREW, ONTARIO

DOCK BOARDS
FOR RAIL OR TRUCK

MAGLINE INC.
P. O. BOX 344
PINCONNING, MICHIGAN

Circle No. 110 on Card, facing Page 49, for more information

If we are to preserve the 'inherent advantages' of all forms of transportation, we need a coordinated and unified system, operating in a proper regulatory environment, under a single transportation authority



AUGUST, 1954
Vol. 53, No. 8

Exploring The Railroads' Inherent Advantages

By John H. Frederick

DA Transportation Consultant

THE NATIONAL transportation policy directs Congress, in its regulation of competitive relationships between types of carriers, to recognize and preserve the "inherent advantages" of each form of transportation, both from a service and economic standpoint.

The regulatory environment in which the railroads operate is supposed to be such as to permit advantage to be taken of the "inherent advantages." What are these advantages and how may they be made effective both for shippers and carriers?

Advantages Defined

Perhaps the greatest inherent advantage is that the railroads can move tremendous quantities of all kinds of freight and large numbers of people indiscriminately, in all seasons and in all weathers, over long distances with relatively little tractive effort, at high speed, through the use of flange-wheeled vehicles on smooth steel rails.

This movement is accomplished in large units, trains made up of many cars hauled by heavy-duty motive power, with the use of small amounts of manpower, at a low-line-haul cost.

Because of the development of the railroad system, the more than six hundred operating companies, though keenly competing with each other for business, operate virtually as partners in the production of a unified service that is nation-

wide and, with the cooperation of Canadian and Mexican railroads, continent-wide. Only in trains of cars is it possible to combine the convenience and flexibility of the single car as a shipping unit with the economy of mass movement.

Because of these advantages, railroads haul freight at an average ton-mile price far below that of any other form of transportation offering anything approaching a general or common carrier service. No other means of transportation can carry all forms of traffic as economically, dependably and safely as do railroads, month in and month out.

The railroad rate, moreover, is based on the full cost of providing the service including heavy property taxes on facilities. (In cases where waterways may appear to be more economical, their services are restricted to certain periods of the year, and usually to certain traffic. The pipe lines are an economical form of transportation for only a few kinds of traffic. Air carriers are fast, but can only handle certain types of traffic fitting into their size and weight limitations.)

Regulatory Changes

One of the most important things necessary to preserve the inherent

advantages of the railroads is to change our regulatory pattern. As it now stands, Federal and State regulation is tending to deprive railroads of the mass traffic movement to which they are naturally fitted, and to keep them forcibly in the small-lot carrying business, where they are economically inferior to other agencies. The railroads are being forced into the retail carrying business, whereas their inherent advantages point to their being wholesale carriers.

If the railroads, in response to changing industrial practices, shipping needs and habits, become retail rather than wholesale carriers they must be permitted to adapt their operations to such conditions or they will be unable to meet the need for smaller-quantity, lcl-type services.

Otherwise, inherent advantages, which should benefit all concerned will be lost. For example, railroads must be permitted to substitute truck service for handling lcl even to the extent of hauling their own loaded trailers on flat cars.

Much has been said and written in recent months regarding trailers-on-flats but it would appear that if the railroads are to expand this type of transport, they should haul their own trailers as one means of reducing terminal costs of handling small shipments and providing a flexible door-to-door service to shippers and receivers.

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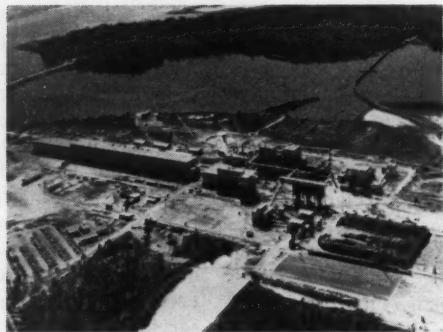


Wood is unloaded from trucks and open rail cars by two crawler cranes. Entire truck is unloaded in one swing



Parallel inclined 36-in. wide Link-Belt conveyors for handling refuse and chips. Belt on left goes to storage area

Mechanization Boosts Paper P



Air view of St. Regis mill, in Jacksonville

By C. E. Wright

DA Southeastern Correspondent

Complete mechanization in this new Florida paper mill—from receiving of raw material, through processing and manufacturing, to warehousing and shipping—expedites production of kraft papers

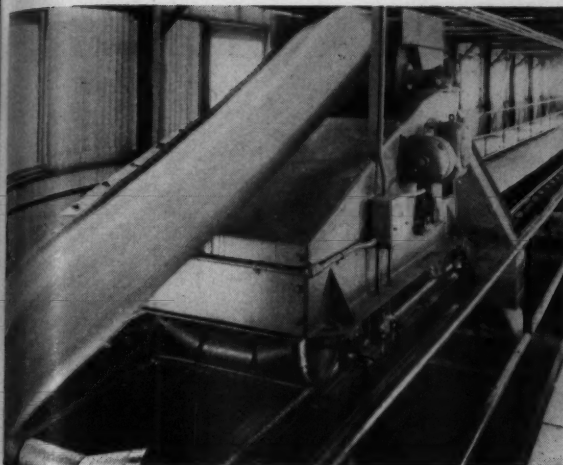
COMplete mechanization enables the new kraft pulp, paper and board mill of St. Regis Paper Co., in Jacksonville, Fla., to produce 300 ton of paper a day, or approximately 100,000 ton a year.

The Jacksonville installation is the newest of seven pulp producing mills operated by St. Regis, which has mills and plants at 28 locations in the United States and abroad.

Complete Mechanization

The mechanization theme is carried through the entire operation, from receiving of the raw material in log form, through the processing stage, to the warehousing and shipping of the finished product in roll form.

The new plant, located on a 200-acre site on tidewater, is a fully integrated mill, in that it manufactures paper from pulp, which it produces. It is capable of making a range of products from 25-lb paper up to and including caliper 24-point board in a variety of specifications.

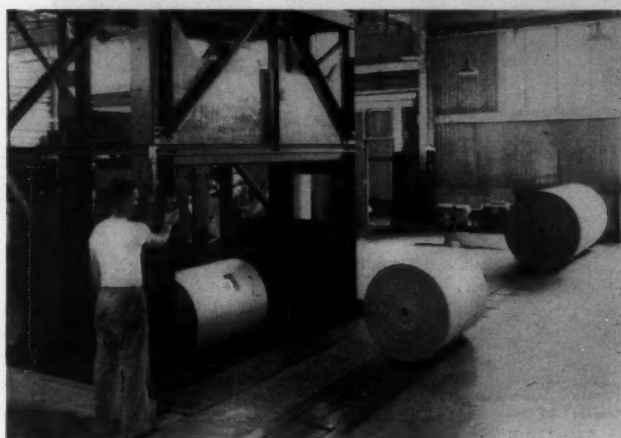


Another 36-in. wide roller bearing belt conveyor with a traveling tripper delivers chips to three storage silos



Chip storage silos with conical bottoms. Rotary plate chip feeders deliver to reclaim belt serving digesters

L-B double strand, roller chain pallet conveyor, rides flush with floor, delivers rolls to skip-type lowerer



Production

Standing timber on more than 310,000 acres within 100-mile radius supplies the Jacksonville mill. Approximately 175,000 cords of wood must be delivered to the mill each year to assure full production.

Log Handling

Wood is delivered to the mill by truck and rail in 5-ft, 3-in. long logs. Two large crawler cranes handle all of the logs into and out of the plant's 5-acre, completely paved storage yard.

The rail cars are unloaded by a crane with a grapple. The trucks are unloaded by crane and sling, a full truckload at a time. The wood is stored on the asphaltic concrete base in 35-ft high piles.

Crane Handling

Wood is transferred by crane grapple from these piles to a pair of 500-ft, steel lined, concrete flumes. Some 32,000 gal of water a minute is pumped through the flumes to assure an even flow of logs to chain-type conveyors enroute to the barking drums.

Grit collectors and traveling

water screens are provided to remove solids and bark from the flume water, which then becomes reuseable. From the flumes the logs go to a pair of 12x45-ft, chain-suspended barking drums. Two 150-hp motors supply power for a tumbling action, which debarks the logs.

Conveyor System

Bark drops from the drums to a drag-chain conveyor, which delivers it to a bark crusher. The barked logs travel on inclined conveyors to a pair of chippers.

Steel encased bucket elevators

carry the chips to four surge hoppers. Oversize chips and slivers are delivered to a rechipper and then returned to one of the bucket elevators and screens. Sawdust and fines drop to a 36-in. belt conveyor, which also receives crushed bark outside the wood room for delivery to a bark boiler.

Accepted Chips

Accepted chips travel on a 36-in. belt conveyor which runs parallel to the bark conveyor. This conveyor delivers the material to another 36-in. belt conveyor, equipped with a

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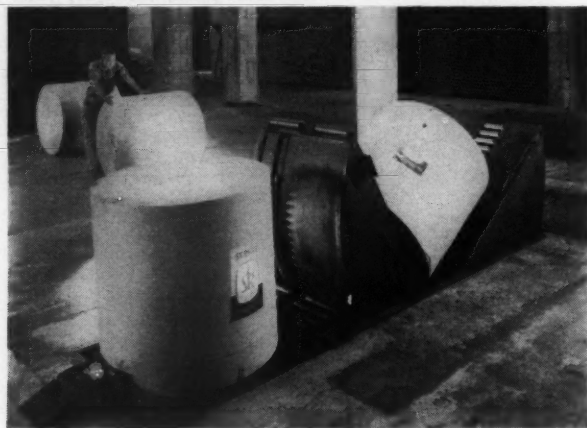


7½-hp electrofluid drive through enclosed herringbone gear and RC roller chain to head shaft of roll conveyor



Power operated, finger tray, skip-type lowerer delivers rolls from paper finishing room to shipping room floor

From skip-type lowerer, rolls go to this automatic, power-operated roll upender located adjacent to lowering unit



Pictures on this and preceding pages supplied courtesy Link-Belt Co.

Mechanization Boosts . . .

(Continued from Preceding Page)

traveling tripper, mounted in a conveyor gallery on top of three 42-ft diam, 65-ft high chip storage silos.

Reversible Shuffle Belt

Chips discharged to the silos are reclaimed through the conical bottoms by means of rotary plate feeders equipped with discharge plows. The feeders deliver to a 42-in. roller bearing belt conveyor, which rises above the digesters, where it delivers to a reversible shuttle belt conveyor.

The shuttle belt conveyor can discharge over either end, and deliver to any of the mill's four digesters, where the chips are cooked. After processing, the cooked pulp is put through vacuum deckers, and then moved in slush form by belt and screw conveyors into storage tanks.

Manufacturing Process

Also mechanized are the stages of manufacturing through which the cooked pulp is run in the manufac-

turing process, including chemicals handling and processing, recovery and liquor making, pulp beating, actual paper making, and paper finishing.

Pallet Conveyor

In the finishing room a bent plate, double strand, roller chain pallet conveyor, operating flush with the floor, is designed to handle one or two 65-in. diam, 110-in. long rolls of paper at a time, on their side, a distance of about 75 ft to the roll lowerer.

The machine for lowering the rolls of paper from finishing room to shipping room, a drop of 16 ft, 6 in., is a power operated, finger tray, skip-type lowerer.

Roll Upender

The skip descends, discharges each roll to an inclined unloading skid, and rises empty to the second floor. On the shipping room floor a power operated unit upends the rolls, which an attendant pushes or rolls onto it from the adjacent lowerer. The roll upender is completely automatic.

The Pay-off

The Jacksonville mill employs many unique features, applied for the first time in paper production. Although it is relatively early to evaluate the results (the mill has been in operation one-and-a-half years) indications are that the mechanization program has paid off handsomely. •

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Successful Routing of Motor Carrier Shipments

Successful route determination is a result of careful tariff study and years of experience—unless the shipper has this experience and tariff knowledge, he should depend on the carrier for routing

THE FIRST thing to be determined in routing a shipment is—who has the authority to route. The authority to route via railroad is clearly vested in the shipper by Section 15, Paragraph 8 of the Interstate Commerce Act.

Highway Routing

In routing shipments via motor carrier that authority is not so clearly stated but, it is equally as strong whenever a shipper does choose to route his freight.

If a motor carrier accepts and signs a bill of lading contract which contains a routing, and later forwards the shipment via another route, resulting in a loss to the shipper, the carrier is guilty of a contract violation.

The authority or privilege to route freight carries with it a certain responsibility which the shipper must accept.

First, the routing should be complete and specified, naming all line haul carriers. Second, the routing, complete as such, must appear on the shipping order, which is the part of the bill of lading retained by the carrier.

Finally, in routing shipments via rail, in which one specifies—"via cheapest way" it will be accepted by the carrier as an all rail movement, and does not impose the

By **T. J. O'Loughlin, Jr.**
Traffic Manager
Law & Ingham Transportation Co.
Nashua, New Hampshire

obligation of protecting rail/water rates upon the carrier.

This article shall be concerned only with routings via motor carrier.

Some companies adopt the policy of not "putting all their eggs in one basket," whereas, other companies feel that better service and less confusion and congestion can be obtained by limiting the number of motor carriers at loading doors.

Both policies have merit. Therefore, the motor carrier industry necessarily prepares itself to meet and blend in with either policy whenever and wherever met.

Connecting Lines

To accomplish this, the motor carrier who originates the traffic endeavors to interest desirable connecting lines to participate in agency tariffs in concurrence with him. This protects not only a through route, but also a through rate from origin to destination.

Unlike the railroads, who are required by the ICC under the pro-

visions of the Mann-Elkins Act of 1910 to set up and protect through routes and through rates, it is entirely up to a carrier's own volition to determine whether or not he shall participate in through routes or rates.

Thru Routes & Rates

The actual mechanics of a motor carrier's through route and through rate is a matter of self determination between carriers.

For example, Motor Carrier A originates a shipment in Manchester, N. H., destined for New York City. Motor Carrier A does not have operating authority beyond Boston, Mass. Therefore, in order to handle the shipment, he must engage Motor Carrier B to transport the shipment from Boston to New York.

Under today's competitive circumstances, Motor Carrier A would not be considered by the shipper as a potential carrier for the New York movement unless such routing offered a rate equivalent to that of the direct service carrier.

Since it is apparent that the two go hand in hand, Motor Carrier A and B both must concur in the through movement, protecting both the route and the rate, and publish
(Please Turn to Page 52)



Incoming packages are moved directly from the pick-up truck to a power belt conveyor line on the receiving dock



Incoming parcels are weighed on one of 12 scale units which are mounted flush with the line to avoid any lifting

Canadian Railway Express Increases Volume 328%

With no room for expansion, the Canadian National Railway Express was faced with an increase in daily volume from 7,000 to 30,000 packages—a mechanized handling scheme, improved terminal layout, and a new electronic waybilling system provided the solution

CANADIAN Railway Express operates a 35-year-old terminal in Toronto which was designed to handle an average daily volume of 7,000 packages. Today's daily package turnover is rapidly approaching the 30,000 mark—and there is no room for expansion.

With no additional space to be had, and no relief in sight from the growing volume of business, management decided that the only solution to the problem must be

found in an improved method of operation.

A more expedient plant layout was adopted, a modern mechanical handling system installed, and a unique electronic waybill calling system instituted. The combination proved effective, and today the Toronto terminal is capable of handling a full 30,000-parcel daily turnover.

An extensive study was made in 1952, covering incoming, outgoing,

and trans-shipping traffic. The study included peak loads, which change with the four seasons, and the rate of pick-up by motor vehicles.

Among other shortcomings in the existing system, it was noted that considerable time was lost through location of the railroad tracks. Because the tracks were on a level with the platform, all outgoing packages had to be lifted into the cars—and all incoming



Overhead conveyors carry parcels to sorting area, where waybill information is phoned to the tape recording area



The waybill caller uses headset microphone combination, central switchboard connects him with tape recording units

By Hugh G. Jarman
DA Canadian Correspondent

packages lowered to the platform.

In addition, it was found that there were not enough track facilities for cars at the west, or express department end of the building.

A third bottleneck was discovered in the practice of calling waybill information direct to waybill clerks. In addition to taking valuable space on the platform, a good caller could dictate the information approximately three times as fast as the clerk could record it.

Improvement Program

The first step in the renovation program involved the gradual realignment of railroad track levels, with all track beds being depressed so that car door entrances are on a level with loading and unloading platforms.

Next, a series of power belt conveyors was installed, leading direct from incoming platforms, to the weighing and sorting area, through the calling section, and finally to the loading platforms.

The survey had revealed that 90 per cent of the packages handled weighed less than 100 lb, and were

(Please Turn Page)



The central switchboard is surrounded by a battery of 20 tape recorders, each with its own plug-in on the board, similar to a telephone system

Waybills are written at the billers' desks, where cartridges from the tape recording machines are run through one of 36 play-back machines



Canadian Railway . . .

(Continued from Preceding Page)

not larger than 3 x 3 x 4 ft. Various type systems were installed to handle the different types of package traffic, all of them capable of handling parcels of the above specifications.

Two-direction gravity roller conveyors and power driven overhead systems were chosen. The power belt units are reversible. During peak periods all power driven and gravity systems operate in one direction. The overhead system operates opposite to the peak load direction, keeping the area clear of stray packages.

Portable conveyor sections are used to transfer parcels from one

system to another, from one track to another, and in and out of rail cars and trucks.

To supplement the improved plant layout and handling system, it was decided to install a tape recorder set-up for waybill processing. A soundproof, air conditioned office was constructed on the floor above the express department level.

Desks and other office equipment for 36 waybill clerks were installed in the office. Each clerk has a telephone and a play-back tape recording machine as part of his equipment.

A central switchboard was con-

structed, surrounded by a battery of 20 tape recorders. Each recorder has its own plug-in on the board, in a system similar to a regular telephone board. The board is connected with each of the 36 billing clerks, and has a plug-in switch to each caller station on the working platform.

With this system, the operator can connect any caller direct with a billing clerk, or to the tape recorders, as the traffic demands.

Package Flow

As each parcel comes into the building it gets a prepaid or collect label. After tagging, the parcel is weighed on one of the flush-mount scales. The weight and number of shipment is marked on the waybill label, and the parcel is shunted to either the collect or prepaid conveyor system.

Sorters transfer each shipment to its proper channel by means of the portable conveyor systems. As each shipment is segregated, a caller plugs in to one of the tape recorders and dictates the waybill information.

One 15-minute tape will record 75 express shipments, and the operator can cut in on a new tape immediately as the old one is filled. The caller can dictate at maximum speed without fear of jamming the machine.

Because it takes a waybill clerk approximately three times as long to transcribe the information as it does to dictate, only five minutes to a tape is allowed 45 minutes before discontinuing waybilling for any train.

In the final 15 minutes just prior to train departure, the caller is switched by the operator directly to a waybill clerk.

Inside the waybill office, reels of tape are delivered from the switchboard to billing clerks on portable, rubber-wheel trays. With 20 recorders available for simultaneous use in peak periods, some 1,500 shipments can be called off in 15 minutes.

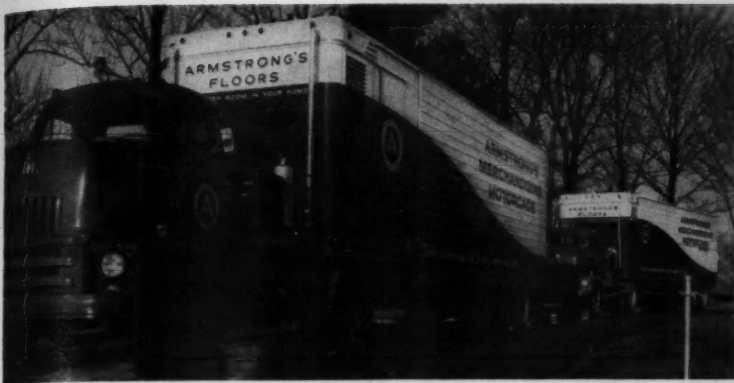
Once transcribed the tapes are rewound, automatically erasing the information, and they are ready for immediate reuse. As the waybills are written they are placed on a conveyor belt for immediate delivery to the sorting area.



Packages move up an inclined power roller-belt conveyor to the rail loading platform, where they are shunted to proper outgoing rail car

A short section of portable gravity roller conveyor extends from the main conveyor line into each car to minimize handling steps in loading





These giant tractor trailers — the largest and tallest permitted on the highways — are bringing new merchandise techniques to Armstrong dealers



Lined parallel, sides of trailers form center floor and ceiling of auditorium

Two 25-kw generators mounted on each cab produce all the electricity



Outer sides of each trailer slide out, interior walls fold out for extension

Expansible Trailers Keep Sales Rolling

Two trailers combine to form mobile auditorium
with 1,000 sq ft of floor space and seating 100

ARMSTRONG CORK CO. currently has a "Merchandising Motorcade" on the road that's made up of two tractor trailers developed by Boyertown Auto Body Works that combine to form a mobile auditorium with 1,000 sq ft of floor space and seating capacity for 100 persons.

When a location for a meeting is determined they pull off the road and line up parallel with each other. Sides of each trailer open up to form an expanded ceiling and floor. The inner sides of each trailer fold out and join, forming the ceiling and floor of the auditorium. The outer sides, or wings, move out somewhat like drawers to either side.

The front and rear of the trailers are also joined and jacks are

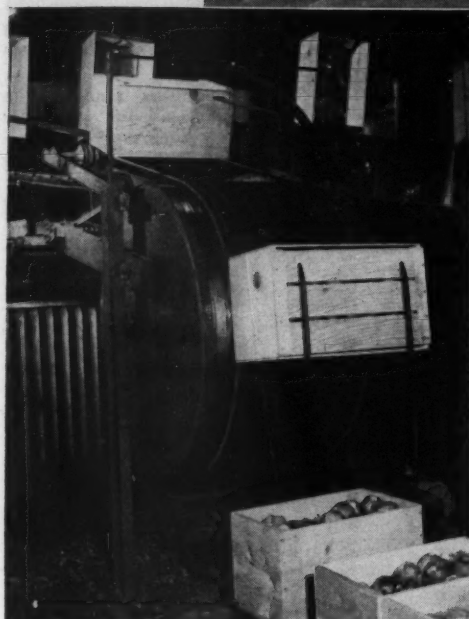
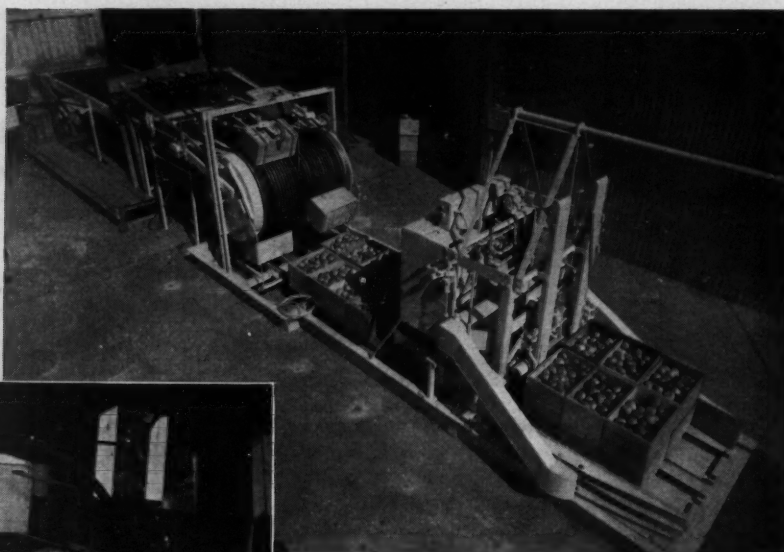
used to brace and level the entire interior.

Two 25 kw generators mounted on the back of each International Harvester trailer cab make the unit entirely independent.

An air-conditioning unit completely changes the air in the interior every three minutes. In winter a gasoline driven heating unit supplies radiant heat through the entire floor of the trailers. •

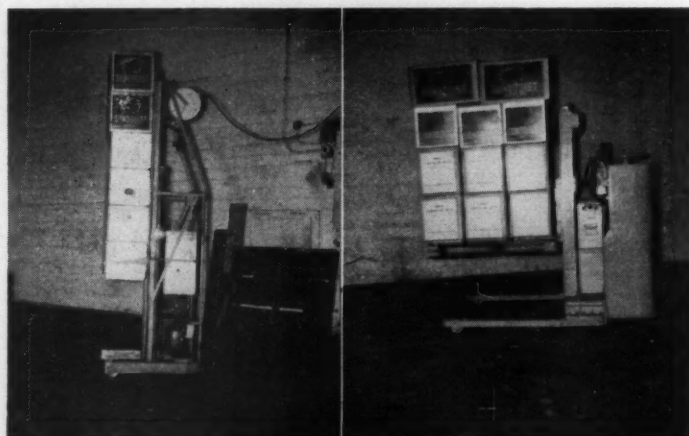
Front view of new mobile auditorium covering 1,000 sq ft, seating 100





This automatic dumper provides gentle, positive transfer of fruit from box to conveyor. It lifts the box off the fruit, rather than pouring fruit out of the box, which eliminates bruising problem

Various type equipment is experimented with for breaking-out and transferring filled boxes of fruit. Single-stack lifter and straddle-type truck shown here are effective in limited space areas



Distribution of

Distribution is one of the most serious of all problems facing the fruit grower—he must get a delicate product to market with a minimum of spoilage and at the right time

By Warren E. Crane

DA Pacific Northwest Correspondent

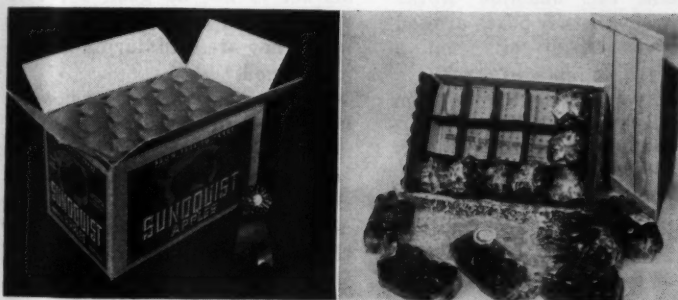
IN THE soft fruit industry, one of the most pressing problems involves distribution—the transfer of fruit from the tree to package, to storage, to market.

Because of its delicate nature, and because a bruised specimen has little or no market value, the fruit must be subject to careful packaging and handling through-



Automatic bagging machine fills and weighs bags of from 2 to 10 lb, can be dump-fed, or fed directly from a powered belt conveyor line

Soft Fruits



Left: Prize winning apple box is weather-proof, light-weight, and is control sealed. Right: Cellophane inner package aids in marketing

out the entire distribution cycle. In addition, the seasonal nature of the market makes it mandatory that soft fruits reach retail outlets at precisely the correct moment.

In recent years distribution methods have been improved considerably. The improvements resulted largely from experimentation carried out by individual

growers and packers, cooperative units, and government agencies.

The most important improvements involve the use of specialized handling equipment, superior packages and packaging techniques, and better storage practices.

Some of the more vital work has been done in packaging. As an

example, Sundquist Fruit and Cold Storage, Inc., of Yakima, Wash., in cooperation with Kieckhefer Container Corp., has developed a prize-winning fibreboard box which many sources claim is superior to wooden boxes.

The container is weather-proof, light, easy to handle, and sturdy. A man can stand on its edges without breaking the box down.

Easy Access

Because of the special design of top flaps, it is possible for a freight or customs inspector to open the box, check the contents, and determine the condition of the fruit, without injury to the box. Only two of the top flaps are glued, making a secure container, but permitting easy access.

Sundquist also has experiment with various types of handling equipment. The firm has found that a fork truck-squeeze method is slower than fork truck-palletization, and requires more careful manipulation. While palletization is the quickest of the two methods, it also is the least flexible.

72 At a Time

By means of the squeeze method, as many as 72 empty boxes in 6 layers of 12 each can be lifted simultaneously. The same method handles 36 or 48 loaded boxes in a single lift.

Sundquist has designed a unique overhead monorail system, which is expected to be the first of its type ever installed in a fruit warehouse. When completed, it will be possible to transfer loaded boxes throughout the entire packing plant and warehouse via monorail. Automatic transfer from one rail to another is planned.

Automatic Bagger

Automatic dumping and bagging machinery also has helped speed the process of distribution. The automatic bagger fills and weighs bags of various types soft (and other) fruits in 2 to 10-lb bags. (Please Turn Page)



Squeeze method used in Sundquist plant lifts as many as 72 empty boxes in one operation



Fork truck-palletization system in Roche Fruit Co. warehouse permits high stacking of fills

Distribution of Soft Fruits

(Continued from Preceding Page)

is rapid and accurate, and is designed to allow the operator to quickly juggle fruit for close weights.

It contains two variable speed automatic belts which feed bag holders mounted on over and under scales. The unit can be fed by the dump method or directly from a moving conveyor belt. Bags can be quickly and securely attached to heads without foot levers, switches, or similar devices.

One of its features is the controlled tilting bagging heads, which are lofted to start the cycle and slowly fall to allow the fruit to enter the bag without dropping. This gives a tight-fill bag and eliminates bruising.

Automatic Dumper

The automatic dumping machine provides gentle, positive transfer of fruit from box to conveyor belt. It lifts the box off the fruit, rather than pouring the fruit from the box. Pears, peaches, apples, oranges, apricots, olives, grapes, tomatoes, and other delicate fruits are dumped without harm by this unit.

Boxes are elevated from floor level, and the machine works equally well whether boxes are fed from a de-stacker or from a straight line. It features a positive speed control, and can handle from 1,000 to 5,000 boxes a day.

Temperature Control

Other important work has been accomplished in the area of temperature control. Pat Roche, vice president and general manager of the Roche Fruit Co., Yakima, is considered an authority on the best temperatures for such fruits as apricots, Hale peaches, and Bartlett pears.

Roche maintains that when Hale peaches are placed in cold storage for three to five weeks, it is usually injurious to their flavor; and when they are left in storage too long, they dry up more rapidly than usual when released from storage. He has found it is best to store Hales at a temperature of from 31 to 32 deg F for from 4 to 11 days.

Bartlett pears are most frequently used for canning and are subjected to 18 deg sugar tests. They are stored at 30 to 31 deg.

The heat then is pulled out of them and they are restored at the same temperature.

Six Weeks Storage

The best storage time for Bartlett pears is six weeks. Roche has stored Bartletts until February and March, but has found that the market is not as good for them that late in the season as it is when they are sold during the normal period.

He also asserts that apricots are best when pre-cooled at 30 to 31 deg., packed and then placed in cold storage for about 10 days at the same temperature. They usually ripen from the inside out. For that reason they are placed in cold storage before they are fully ripe.

Prune Storage

Fred Westberg, secretary-manager of the Washington State Fruit Commission, has followed up earlier studies made by the United States Department of Agriculture of the various temperatures that are best for the cold storage of Italian prunes.

This fruit has been subjected to various temperatures ranging from 61 deg. down to 31 deg. After experimentation, he asserts that Italian prunes ripen most satisfactorily and with the best flavor qualities following storage at from 40 to 45 deg. for periods of from 10 to 20 days.♦

Canadian Cooperative Solves LCL Problem

When Canada's Mixing Rule was repealed and new all-commodity freight rates approved, a group of large retailers formed their own shippers' association for the consolidated handling of lcl freight to the West

TO TAKE advantage of the repeal of Canada's Mixing Rule and of new all-commodity freight rates, a group of Canadian firms have combined their traffic for the West through an associated company, organized solely for this purpose.

Four department stores and two chain stores form the group. They include: T. Eaton Co., Hudson's Bay Co., Simpson-Sears, F. W. Woolworth, S. S. Kresge, and Gordon Mackay Co.

Shippers' Association

They have combined to form the Montor Shippers' Assn. Actual handling of cargoes is performed by a Montor subsidiary, the Tormon Assembly Agency.

Repeal of the Mixing Rule is a milestone in Canadian transport history. It has been in effect since 1884, when Canada's first freight classification was drawn. It was formulated to protect wholesalers in Western Canada, and prohibited shippers from mixing commodities taking different carload ratings in the same carload.

In Canada, all conceivable commodities are classified in 10 groups. The first half covers most manufactured goods, while the second half is mainly devoted to bulk commodities.

As an example, the following rates per hundredweight apply be-

By John Grindrod

tween Toronto, Ont., and Vancouver, B. C. (2,800 miles): Class 1, \$10.28; 2, \$8.45; 3, \$6.70; 4, \$5.18; 5, \$4.48; 6, \$4.04.

Thus, a given product subject to second class rates in lcl quantities would, in all probability, enjoy fifth class rates in carloads of an average 24,000-lb minimum weight. The difference between \$8.45 and \$4.48, less the small commission per 100 lb to be paid to the forwarding company, represented the available saving to the consignor.

Low Inventory Level

Over the years, however, business methods have changed. The western wholesaler has practically disappeared and, under current conditions of faster transit times, the retailer orders in smaller quantities and with greater frequency. This practice is actuated by the advisability of keeping inventories low.

It was after these facts had been placed before the Board of Transport Commissioners and the railways that they agreed, after an 11-year struggle, to repeal of the Mixing Rule.

The legal authority having been

established, the group of retailers previously mentioned approached the railways with a proposal that there be made available all-commodity rates from the larger eastern and central producing areas to the principal consumer cities in the four western provinces.

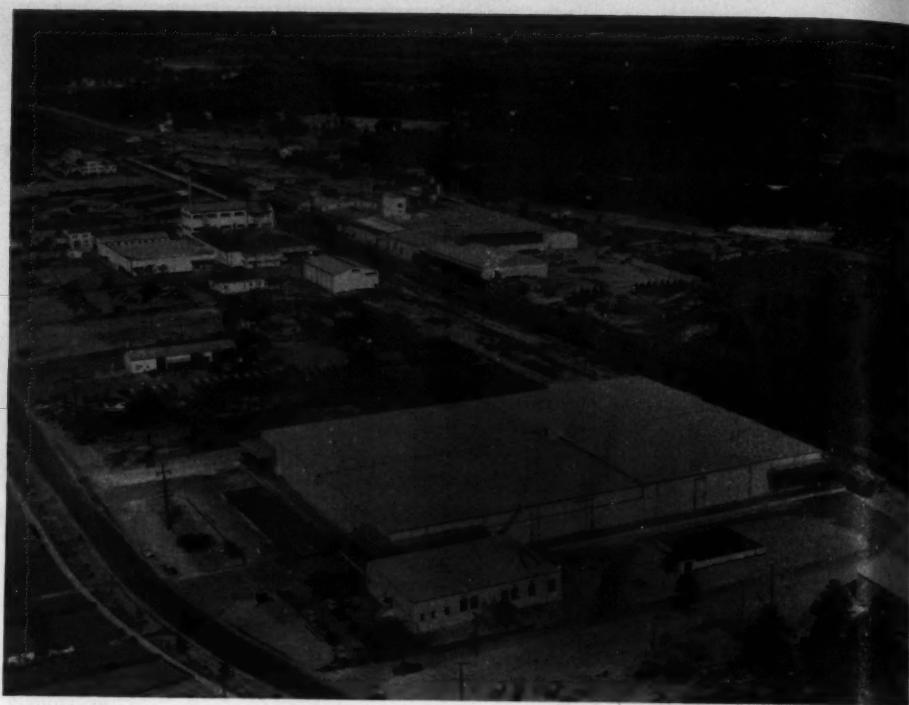
The railways agreed, and established such rates on a basis of the third class, i.e. \$6.70 per 100 lb at a minimum carload weight of 20,000 lb, compared with \$10.28 for first-class freight. This concession cut previous first-class freight rates by 35 per cent.

It also eliminated the need for costly rail express for urgent items, which cost more than double the rates under the new schedule. The same fast traveling time is provided as for rail express, at \$14 per 100 lb.

Co-loading Responsibility

It was here that the Montor Shippers' Assn. and the Tormon Assembly Agency came into existence. Montor is a non-profit organization and exists for the sole purpose of co-loading the combined tonnage of its associate members with the dual object of procuring faster deliveries at less cost. Tormon came into existence only because the forwarding companies were not interested in the small shipments.

(Please Turn to Page 58)



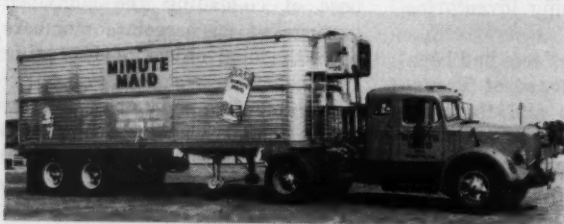
In addition to refrigerated warehouse at Plymouth, Fla., (above) Minute Maid has similar installation at Leesburg

Frozen Concentrates Require Careful Handling

By C. E. Wright

DA Southeastern Correspondent

Minute Maid maintains its own fleet of refrigerated trucks for hauling concentrates, trained crews help reduce spoilage



Pasco Packing Co's new freezer plant at Dade City, Fla., accommodates up to 2,500,000 cases of frozen concentrates



Low temperature requirements of concentrates demand strict control over the product in all phases of distribution—from processing, to terminal warehousing, to retail outlet

FROZEN citrus concentrates have presented some of the most critical problems of all frozen food products in their storage, shipment, and distribution. Problems arise from the low temperatures at which the product must be kept from producer to consumer, and the danger of spoilage if such low temperatures are not maintained.

Growing Industry

In the amazing expansion of the Florida concentrate industry in eight crop years, from 225,684 gal in the first season of 1945-46 to an estimated 45,000,000 gal or more in the 1953-54 season, concentrators have been called upon to provide quick solutions to problems that have arisen in preservation of the concentrates.

Where the producer has complete control of the product, as in his own processing plant and cold storage warehouse, problems are solved more easily. Some of these

operations have been subject to experimentation for best results. From the time the concentrate leaves the producer's cold storage rooms until the consumer takes it home from the corner grocery, however, there has had to be constant watchfulness.

Even now, the distribution phase of selling more than 300,000,000 6-oz cans a year without serious spoilage has not reached perfection. An important phase of the still-existent problem lies in better terminal warehousing.

Chief Trouble Spots

The manager of Minute Maid's Plymouth Freezer Corp. at Plymouth, Fla., claims that warehouse temperatures above the safe level generally are caused by these things: Leaving doors open; insufficient refrigerating capacity; non-use of the capacity they have; temperatures purposely increased to make it more comfortable for the workers.

Any temperature above zero for storage of citrus concentrates is a danger point, because of activation of enzymes. The higher the temperature, the greater the activation. Whether the concentrate is ruined depends not only on the temperature, but on the time in which it is held at a higher-than-zero level.

If the duration of such holding is short, the concentrate can be re-frozen without noticeable damage. But prolonged holding at above zero has resulted in severe losses.

Quality Control

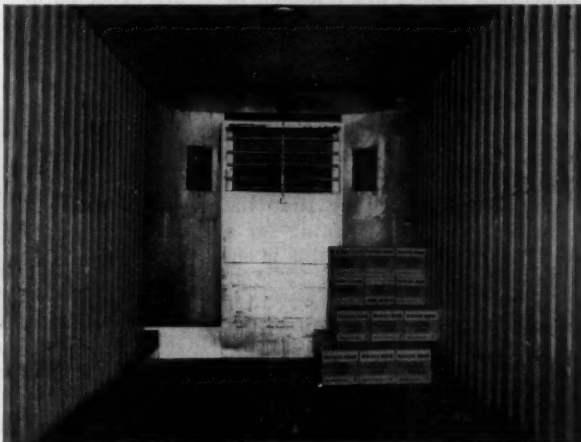
To maintain quality control and prevent losses, citrus concentrators must keep a constant and close check on all shipments after they leave the producers' plants. Minute Maid has quality control offices in New York and San Francisco, from which field inspectors travel to all points requiring their presence in case of trouble.

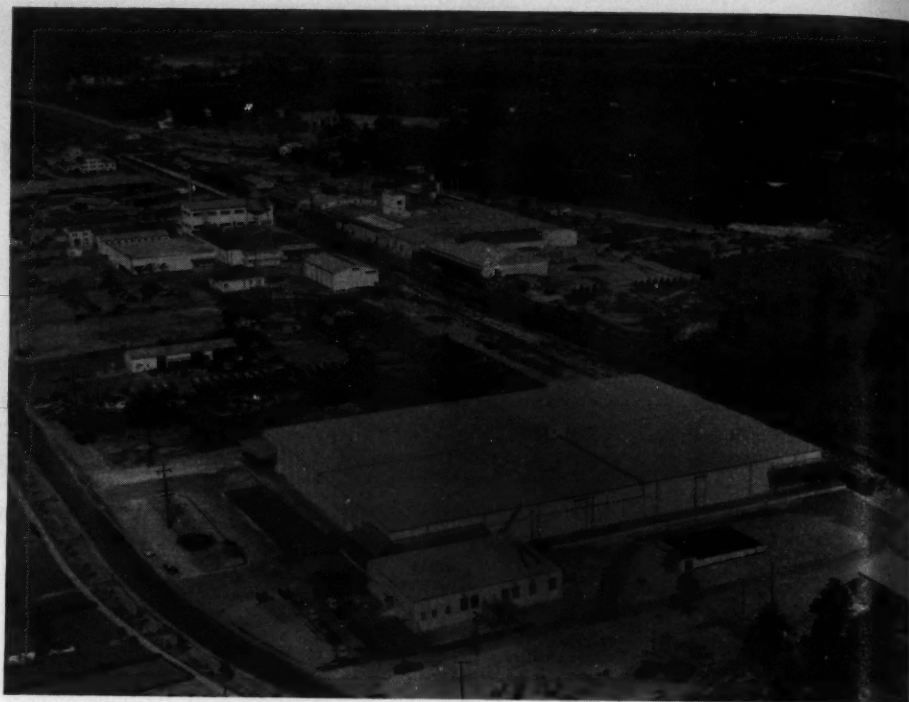
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Railroads are replacing old salt and ice cars with mechanical reefers and recapturing lost citrus trade



Interior of trailer designed for concentrate hauling, paneling and racks keep product from contact with trailer surface





In addition to refrigerated warehouse at Plymouth, Fla., (above) Minute Maid has similar installation at Leesburg

Frozen Concentrates Require Careful Handling

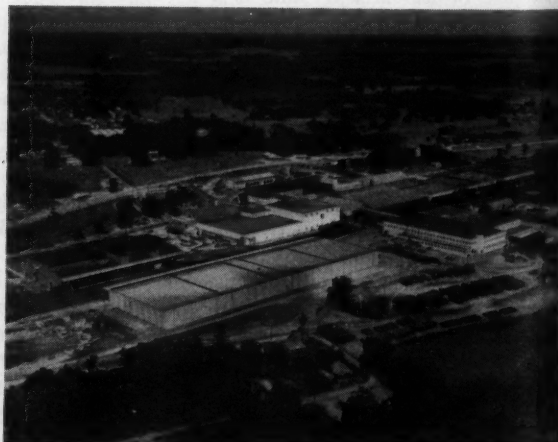
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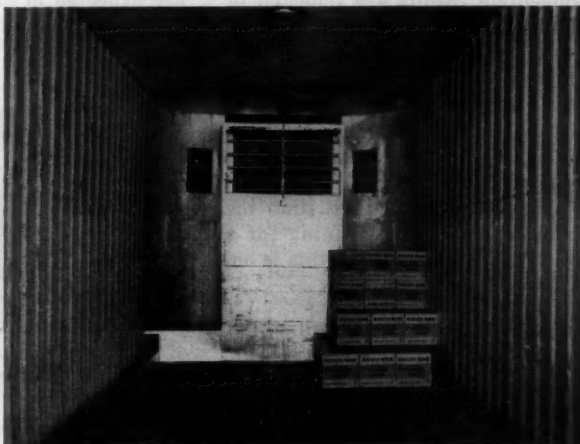
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NATIONAL ASSOCIATION
OF REFRIGERATED WAREHOUSES

Safety Award

TO THE EMPLOYEES OF:

WHO HAVE WORKED FOR ONE YEAR

ENDING _____

WITHOUT A LOST TIME INDUSTRIAL INJURY

Total Man Hours Worked _____

PRESIDENT

CHAIRMAN, SAFETY COMMITTEE

Thirty Safety Certificates were awarded at the recent Annual Meeting to firms going one year without an accident

THE Safety Committee of the National Association of Refrigerated Warehouses has launched an extensive industry-wide campaign to stimulate top management interest in a safety improvement program.

It is gratifying to note that the campaign is receiving tremendous support throughout the industry. Immediate results are reflected in the fact that 30 refrigerated warehouses were awarded Safety Certificates at NARW's recent Annual Meeting for going one year without a lost-time industrial accident. Several more awards have been made since then.

Considering the fact that the campaign has been running for a relatively short period—this is encouraging progress.

Injury Record High

However, the surface has only been scratched. There is considerable room for improvement. For instance, a survey by the commit-

tee revealed that the refrigerated warehouse industry experienced 38.5 lost time injuries per million man-hours worked in 1952. The average for all industry, according to the National Safety Council, was 8.40 for the same year.

Although these figures paint a poor picture of the industry's safety record, great improvements are expected in the future. As the campaign hits full stride, and



By A. R. Carstensen
President, Crystal Ice and Cold Storage Co., Sacramento, Cal.
Chairman, NARW Safety Committee



PART 6

NARW

The NARW has launched an extensive campaign to interest management in safety, in an attempt to lower the industry's extremely high lost-time injury per million man hours index

Safety in

more and more plants become safety conscious, there is every reason to believe that the refrigerated warehouse industry's safety record will be more in line with the national average.

The main emphasis is being placed on analyzing existing conditions and pinpointing weak spots—so that proper corrective measures can be developed and put into action.

Improper safety practices are costing the industry hundreds of thousands of dollars in direct and indirect costs. In fact, there are instances where, in certain classes of work, \$8 and \$10 are being paid in compensation insurance premiums for each \$100 of payroll.

Industry Showing

In the writer's opinion, the reason for the industry's poor showing in safety is that the industry is made up of many small companies with few employees, and of larger companies with comparatively few employees in any one local operation. The manager of the small company is to an extent a jack of all trades—filling in as a general manager, chief engineer, treasurer, etc.

As a result safety has become



Above: One of a number of posters available for use in safety campaigns. Posters should be changed once a week
 Right: Title scene from a new movie on safety made by Clark Equipment Co. Many such films are available free



Refrigerated Warehousing

the neglected stepchild — present in mind, but not receiving the care and attention it needs in order to thrive. To an extent the local manager of the larger company is in the same position. Also, most refrigerated warehouses are handicapped somewhat in that they are not blessed, or cannot afford, a fulltime safety engineer—considered standard equipment in operations where thousands of employees work as one unit.

This is not an excuse for refrigerated warehousemen to throw up their hands and say: "We can't do a thing about improving safety under our working conditions, so why worry about it." This is an improper attitude—and inexcusable. A number of companies in the industry have been doing an excellent job of safety over a period of years.

The best opportunity lies in industry-wide action. Safety is not within the field of competition—it is a mutual problem, to be solved on a cooperative basis. The manual compensation rates are based on the experience of the entire industry in each State. Thus a concerted effort on the part of all will lower the rates with benefit to all, and harm to none.

A prerequisite to a successful safety program is the enthusiastic and wholehearted support of top management. It must get behind the program—and stay with it all the way.

It was on this premise that NARW's Safety Committee launched its campaign.

Industry Survey

The first comprehensive industry-wide accident survey was made by the committee for the year 1952. Results of this survey revealed that approximately 50 per cent of the injuries received were to the back and feet. Accordingly, the committee immediately distributed information on proper lifting procedures and the importance of wearing safety shoes.

A second, or follow-up industry-wide accident survey is being conducted to evaluate and record progress made during the past year. Results of this second survey should be available soon.

In addition, the committee now is working to develop a system of color coding for all plants. The multiplicity of pipe lines and conduit necessary in the operation of a refrigerated warehouse makes it essential that some system of

coding be used in order that lines may be readily identified in any section of the plant. Lack of proper coding often leads to costly mistakes and at times causes personal injuries.

There is no uniformity in the color coding being used by the various companies in the industry. When engineers and helpers move from one plant to another, this lack of uniformity causes confusion and leads to costly mistakes.

The California Assn. has adopted a uniform color code. This system of coding will be presented at the National Convention in Chicago in 1955 with the hope that it will be approved by the industry nationally.

Divisional Levels

As part of its campaign, NARW's Safety Committee also is formulating a sound program that can be carried out at the national, regional, and local levels. On the regional level, the Pacific States Cold Storage Warehousemen's Assn., comprised mostly of companies operating in California, recently organized the California Refrigeration Safety Council.

This group held a two-day or-
 (Please Turn to Page 60)

The Conference Approach To

THIS YEAR promises to be another record year for Materials Handling Conferences. Many of these conferences are actual workshop sessions to which the public is invited to present materials handling problems for scrutiny and advice.

After attending a number of these conferences during the past years as both participant and commentator, I have discovered there is a need for more factual information that the conferee should bring to the conference if the maximum good is to be obtained.

With this in mind, I am endeavoring to give some clues as to what to look for and what to bring to each conference. The material presented here is not complete and should be supplemented with other questions and details relating to each particular industry. This is published strictly as a guide.



By Irving M. Footlik
Secretary
College-Industry Committee
On Materials Handling Education

First, apply the following materials handling check list to your operations:

Handling Check List

Is materials handling a problem that needs attention in your plant? Every "yes" answer to the following check list is an indication that your handling system may be anticipated and is costing you needless waste in dollars and man-hours.

Here is a master check list which should help make your participation in materials handling conferences and workshops more profitable. By assembling more factual information to take to such conferences, the conferee will be better equipped to find a solution to his own problems

1. Are your indirect labor costs high?
2. Is your overhead expense too high at any point?
3. Do you have many employee accidents due to materials handling?
4. Is there much manual handling of materials weighing more than 50 lb by male employees, or 25 lb by female employees?
5. Do you have many handling jobs requiring two or more employees?
6. Are skilled employees, such as machine operators, required to waste time handling materials to and from their machines?
7. Are there frequent delays in production time due to poorly scheduled delivery and removal of materials?
8. Is there an unexplainable decrease in production in certain departments?
9. Do you find material jammed up at certain points?
10. Can you make more efficient use of your storage space by mechanical high tiering of stock to the ceiling?
11. Is there opportunity to utilize overhead space for storage?
12. Are your demurrage charges high?
13. Can you make more efficient use of unit loads?
14. Is much of your material damaged during handling?
15. Are goods often misplaced?
16. Are the maintenance costs on your materials handling equipment continuously rising?
17. Are there many single handling jobs requiring two or more dif-

Handling Problems

10. Percentage of area now used.
11. Ceiling heights.

In conjunction with the above, furnish information relative to transportation equipment used, such as freight car loading facilities, truck loading facilities, size of motor trucks used, type of truck, distance, volume and frequency of shipments.

Factual data on equipment now in use: The number and type of fork trucks, hand trucks, pallets, etc. Be sure to include with this their capacity and size; also information on any auxiliary handling equipment such as boxes, racks, etc., that is available.

Be prepared to indicate management's master plan thinking so that it can also be incorporated into the suggested solution.

Bring any flow charts, floor plans, process charts, photos, etc., that will help illustrate the problem.

Be sure that all your facts and figures are actual and that you have covered all phases of the present method.

If you are armed with the above information, then you have made the proper approach to your materials handling problem and are ready to present your problem to the conference. •

The next step then is what information to bring to the conference. If the problem relates to the choice of equipment for doing a job, obtain the following facts:

1. The volume of goods to be handled.
2. The physical characteristics of the item to be handled, such as weight, length, shape, etc.
3. Travel characteristics such as distance and location of travel.
4. The allotted time in which to do this handling. Included in this would be frequency of operation.

Together with the above there should be some information with relation to the facilities where this equipment will be used, such as:

1. The type of building: Single story, multi-story, etc.
2. Floor load capacity.
3. Elevator capacity and size.
4. Dock facilities.
5. Condition of floors.
6. Bay spacing.
7. Aisle widths.
8. Door widths and heights.
9. Ramp conditions.

ferent types of handling equipment?

18. Do you load freight cars or trucks by hand?
19. Do your shop trucks operate more than 20 per cent of the time empty?
20. Is the major portion of your materials handling equipment over 10 years old?
21. Do you have many rehandling points along your production lines?
22. Does your present handling system eliminate unexpected material shortages?
23. Are you performing too many different handling operations?
24. Do your lines of material travel overlap?
25. Are you using power arrangements when gravity would do?
26. Are you trying to fit misfit handling devices to new production jobs just to use up old equipment?
27. Do you perform a lot of unnecessary handling operations?
28. Have you been using special devices when standard equipment would suffice?
29. Can you combine operations to avoid repetitions of materials travel?
30. Do you try to make one kind of equipment do all kinds of handling jobs?

After this has been done, you and management will be satisfied that your materials handling may be antiquated and is costing needless waste in dollars and manpower. It will also prove a logical reason for attending the conference.

Handling System Analysis

The author, who in addition to his activities with the Material Handling Institute is a handling consultant and an instructor in handling at the Illinois Institute of Technology, prepared the above article principally as an aid to those persons planning to attend the MHI-AMHS sponsored seminars.

The information is of such basic and general interest, however, that the editors believe the principles involved can successfully be applied to any individual handling operation. By honestly answering all 30 check list questions, you are well on the way to a good analysis of your own handling system.

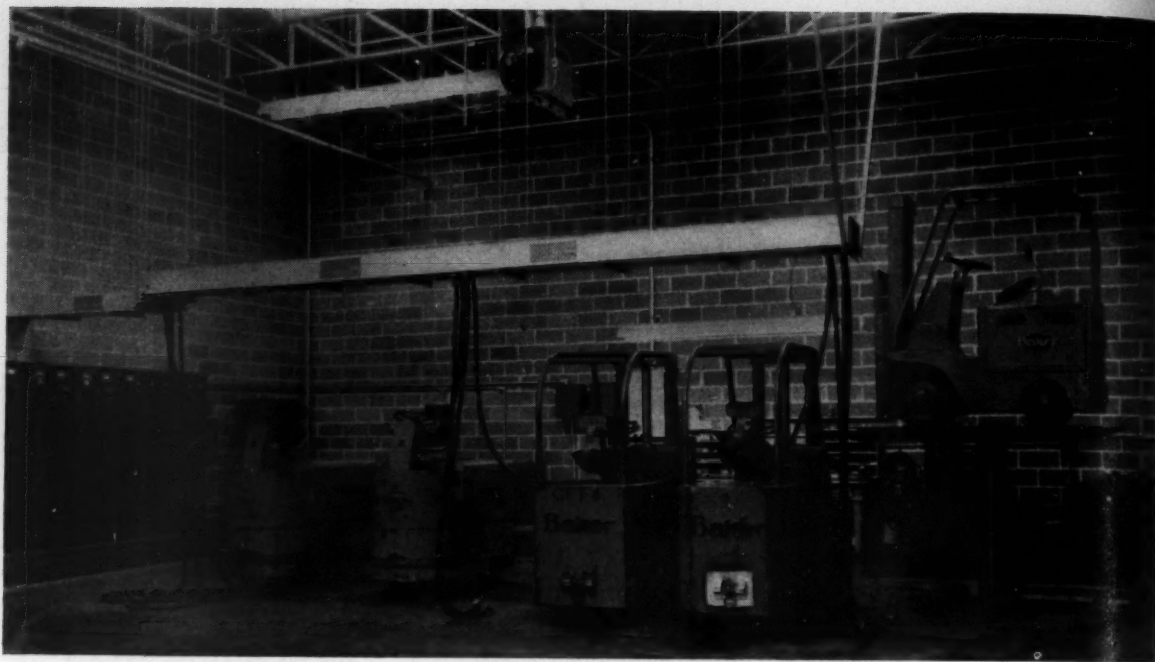


Fig. 1: Charging often is combined with maintenance. Truck is on grease rack while two others get charges

Tips on Battery Room Layout

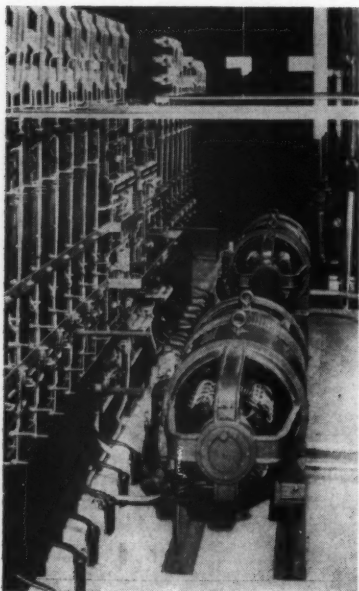


Fig. 2: Rectifier should be close to control panel to allow short wiring

Basic layout, location and equipment ideas for large and small plants, covering simple daily maintenance or major repairs. A few maintenance handling hints also are included

By K. A. Vaughan

Manager, Field Engineering, Gould-National Batteries, Inc., Trenton, N. J.

USERS of battery-powered industrial trucks will save time and money by giving careful consideration to battery-room layout, location, and services, when designing a new shop or remodelling an old one.

The efficiency of this department will affect overall materials handling in the entire plant for years. Its functioning should be consid-

ered in relation to the overall handling system as it exists now, and as it may change in the future.

Maintenance Scope

What do you wish to accomplish in the battery room? Some small shops perform only battery charging and the simplest maintenance required for good operation. Because the distances are not great



Fig. 3: Packard Co. uses trailer towed by industrial truck to take charged batteries directly to the on-floor rolling stock

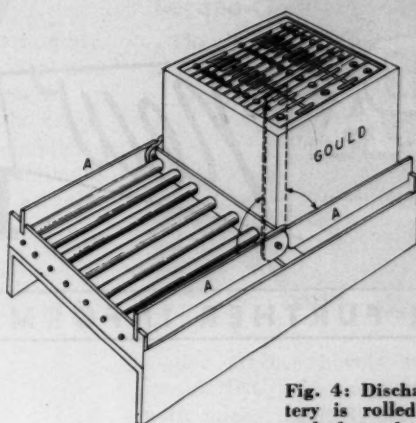


Fig. 4: Discharged battery is rolled on skid and charged one rolled directly into the truck

in a small plant, the charging room location is not of critical importance.

In a very large plant, however, using hundreds of trucks scattered over many acres, the problem becomes more complex. Large battery users may find it economical to repair damaged batteries themselves rather than send them to the manufacturer's factory or local service station. The most elaborate set-up may even include complete rebuilding and assembling facilities.

In many large plants the trucks themselves often are maintained and repaired close to the battery-room; under the same foreman and by the same personnel; as illustrated in Fig. 1.

It has become common practice, in recent years, in large plants to place charging stations throughout the plant so that trucks do not travel long distances for a recharged battery, and can get booster charges during the lunch period.

Another fast-growing practice in large plants involves changing batteries on the job. The recharged battery is brought to the truck in its working area, rather than have the truck travel to the battery-room.

With all these variables, a few general principles will serve as a guide in battery-room layout. Specific details will depend on the number, size and type of batteries, and duty cycles.

Basic Requirements

Important considerations in selecting the location for the shop

are the availability of power, the ease of ventilating the shop, and the distance trucks must travel to charge batteries.

Time required for trucks to return to the battery shop can be decreased by placing the shop at the center of the trucking operations. If the shop must be remotely located, it may be advisable to spot charging stations throughout the plant.

Provision for expansion of the battery shop, as the plant grows, should not be overlooked. The possible expanded use of industrial trucks, in number and capacity, must be considered when selecting charging equipment. Generally, multiple units of equal capacity motor-generator sets are chosen, rather than one large charging unit, because of greater flexibility.

If all your charging is based on using 15-cell batteries and, later on, you need 18-cell batteries, your charging equipment will not be adequate fully to charge the larger batteries in the time allowed.

Give a thought to selecting the best charging method for your purposes. For example, possibly sequence charging will offer advantages in your particular plant.

Equipment and Layout

Equipment arrangement in the shop depends, of course, on the type and amount of equipment to be included. A completely equipped battery shop contains the following items:

1. Hoist with spreader bar or truck for handling batteries.

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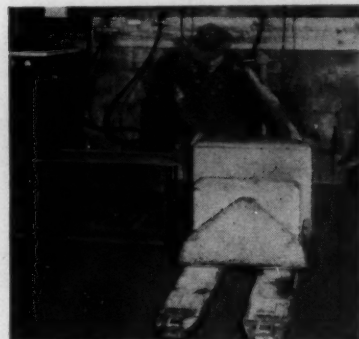


Fig. 5: A 4-ft section of roller conveyor bed on which battery is rolled



Fig. 6: Yoke-hook permits 3-minute change in tight compartment of truck

Fig. 7: Spreader bar with two sets of hooks is attached directly to housing



DA *New* PRODUCTS

FOR FURTHER INFORMATION USE READERS' SERVICE

New COE Series Offers Better Load Distribution



Circle 1 on Card Facing Page 49

Twelve new cab-over-engine motor trucks, the heavy-duty CO-190, CO-200, and CO-220 series, incorporating advancements in COE load distribution and capacity, power, engine accessibility, and maneuverability, have been introduced by **International Harvester Co.**

Four models—each available in five wheelbases—95, 111, 123, 135, and 153 in.—will be offered in each of the three new series. CO-190 series trucks range from 21,000 to 25,000-lb in rated gross vehicle weight; CO-200 series units from 24,000 to 29,000 lb; CO-220 series models from 26,000 to 30,000 lb. Each series includes a Roadliner tractor model with gross combination weight ratings of 50,000, 55,000, and 65,000 lb, respectively.

In addition to refinements in cab-over-engine engineering, including a unique design permitting the vehicle's counterbalanced

cab to lift easily for service accessibility, the models feature high-torque International Red Diamond engines including the entirely new 501 in the CO-220 series models.

Standard engine in the CO-190 series is the Red Diamond 372. Red Diamond 406 and 450 engines are optional in CO-190 series models. The 406 engine is standard in the CO-200 series with the 450 as optional equipment.

Power plant of CO-220 series models is the new 501-cu-in.-displacement Royal Red Diamond which develops 201 hp at 3,000 rpm and 430 lb-ft maximum torque at 1,600 rpm. Carburetor of this newest and most powerful Red Diamond engine is of the four-barrel type with integral mechanical-vacuum governor. Cylinder block is of a special close-grained alloy, precision set. Exhaust valves are sodium-cooled, stellite-faced, slo-roto type.

Handles Loads to 450 Lb

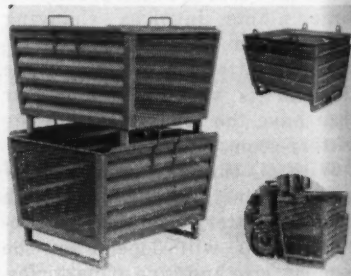
This new addition to the lightweight line of **Magline** magnesium hand trucks is rated to handle loads up to 450 lb. It weighs only 16 lb when equipped with rubber-tired magnesium wheels; 20 lb when equipped with standard semi-pneumatic tires as shown. The 12-H-802 incorporates a shovel-type nose unit, 12 in. long, and is specifically designed for facility in moving bulky packages and cartons, and loads of irregular shape or size.



Circle 2 on Card Facing Page 49

Nesting-Stacking Box

A newly designed nesting stacking box, announced by **Palmer-Shile Co.**, nests one within the other when not in use. A 6-in. nesting clearance between box



tops allows sufficient room for safe manual handling and permits additional loading height. Loaded boxes may be stacked by crane or

A round-up of supplies,
services and equipment
important to the science
of physical distribution

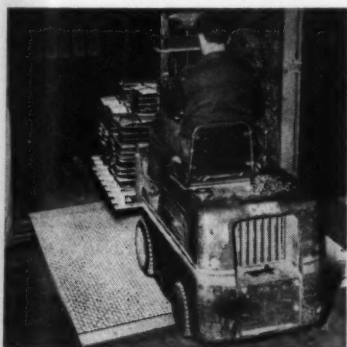
CARD....PAGE 49

fork truck by simply lifting, turning and tiering on the lower box. Made either with two corrugated sides and ends or both ends of expanded metal. Inside dimensions at the box top are 45 in. long and 36 in. wide, depth is 23 in. Weight is approximately 190 lb, with 4,000-lb capacity.

Circle 3 on Card Facing Page 49

Flush-Type Dockboard

Karl A. Herman Co. has made available a complete, new flush type dock installation. This new type of dock installation perfected with Herco Boards calls for no

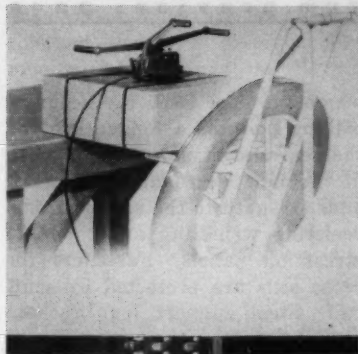


controls that project out from or above the dock surface. The same board is used with the same size, same quality and same capacities but the absence of all levers allows easy trucking across and in all directions over the surface of the board. It allows for an easy approach with hand trucks, dollies or power loaders. False starts and back-ups are eliminated and loading time is saved and cut to a minimum.

Circle 4 on Card Facing Page 49

Seal-Less Strapping

A new method of strapping, known as the Inland Seal-less Strapping, is being marketed by Inland Wire Products Co. It is claimed to offer a new simplicity of application, economy, and holding power. The secret actually

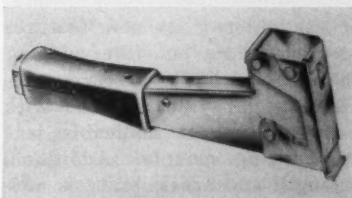


lies in the machine used. In two simple operations, this machine tensions the strapping, cuts it to exact length void of waste, and effects a mechanical interlocking of the two overlapping ends of strapping that has consistently tested between 77 per cent and 86 per cent of the strength of the strapping itself. Coil holders and strapping table dispensers also are being made available to dispense strapping in easy feeding loops. They are available in both floor and stand types.

Circle 5 on Card Facing Page 49

Automatic Hammer Tacker

The HT-50 automatic hammer tacker developed by Arrow Fastener Co. is used exactly like an ordinary hammer. The manufacturer claims that on any light or heavy-duty tacking job, one man with the tacker can do the work of five men with hammers and



nails. It weighs 2½ lb and is 11¼ in. long, and takes ¼, ⅜ and ½-in. staples.

Circle 6 on Card Facing Page 49

Torque-Converter-Drive

The Frank G. Hough Co. has announced an addition to its line of torque-converter-driven Pay-



loader tractor-shovels with the model HRC, a 4-wheel-drive unit with bucket capacity of 1 cu yd struck-load and 1½ cu yd payload (heaped). This new model is available with either gas or diesel engine and is equipped with power-steering. Another feature is the Hough heavy-duty full-reversing transmission which provides four speed ranges in either direction.

Circle 7 on Card Facing Page 49

Bottom-Hopper Semi-Trail

Gramm Trailer Corp. announces production of an aluminum screw type bottom-hopper semi-trailer. The container proper is aluminum while the frameless members are made of hi-tens steel tubing. The screw device powered by a gaso-



line motor located in the rear, operates on an incline toward the rear, permitting a discharge height of approximately 44 in. Controls operating motor and discharge speed are located on either side at rear. Net weights range from 10,200 to 10,500 lb depending upon buyers' choice of standard Gramm Tandem or Gramm's new 9-ft tandem which in many areas permits 18,000 lb per axle. The capacity of the standard unit is 645 cu ft, capable of handling 120 barrels of heavy powders in most states.

Circle 8 on Card Facing Page 49

(Please Turn Page)

DA *New* PRODUCTS

Continued from previous page

Tames Diesel Exhaust

A catalytic muffler that effectively reduces the noxious and irritating components of 4-cycle diesel engine exhausts has been developed by Oxy-Catalyst, Inc. The new device, called the Diesel-er, attaches directly to the en-



gine exhaust manifold and burns by catalytic action the noxious monoxide traces and odorous hydrocarbon fumes in exhaust gases. This catalytic process eliminates much of the heavy smoke and strong odor for which diesel trucks and buses are noted—and in industries such as mining will permit more widespread use of 4-cycle diesel equipment underground or in enclosed plant areas.

Circle 9 on Card Facing Page 49

Aluminum Van Trailer

A complete new line of aluminum van trailers has been marketed by Pike Trailer Co. One of the important features of the new van is the design of the extruded aluminum sections which



give outstanding strength at minimum weight and include improved rub rails, posts, and cross sills. Another feature is the manner in

which the door seals are secured, making possible a longer life for the seal and a more perfect door fit. A new corrugations pattern adds strength to the side sections, resisting wrinkling affect due to stress on panels. Fasteners for cross sills are protected by scuff rail. Steel support leg brackets reduce maintenance costs and eliminate the drop failures which have been experienced with aluminum landing gear brackets. Additional features of the new Pike Van Trailers are the double locking rear doors, flush type hardware, electrically welded steel rear door openings.

Circle 10 on Card Facing Page 49

Drop-Side Containers

Among a new line of Stocktainers developed by the Rack Engineering Co. is this special model which permits greater flexibility



of use. Among its new features are drop sides on either side of the unit which allow freer access. This special unit is made with heavy duty cast malleable legs on built-up mounts. Additional strength and accessibility is added by use of a clearview type grid iron channel base.

A new locking device holds the sides without danger of accident.

Circle 11 on Card Facing Page 49

Palletless Lifting

Crated appliances—such as refrigerators, ranges and dryers—and products of comparable weight and size can be handled safely and efficiently without the use of pallets by means of a new hydraulic crate clamping attach-

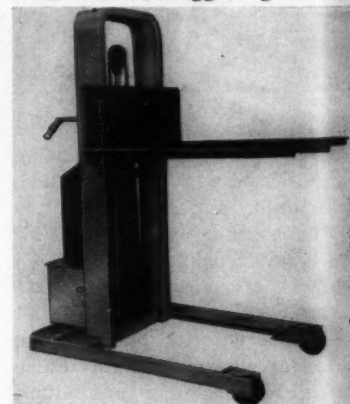


ment developed by The Yale & Towne Mfg. Co. In operation, two short metal arms slide under the crate at the bottom and two hydraulically operated clamps press down on the crate from the top to hold it securely for transporting and stacking. Because the top clamp reverses, it is possible to handle crates from 38 to 75¼ in. high. In the up position the clamp takes crates from 57 to 75¼ in. in height; in the down position crates from 38 to 57 in. high.

Circle 12 on Card Facing Page 49

1,000-lb Hydraulic Lift

A 1,000-lb capacity battery operated, hydraulic, platform lift truck has been put in production by Lee Engineering Co. This B766 Model has a 66-in. lifting height with an overall height of 80 in. Its 30-in. outriggers give it an



overall length of 43 in. The platform size is 32x36 in.

Circle 13 on Card Facing Page 49

Simplified Steel Shelving

Borroughs Mfg. Co. announces a new development in simplified steel shelving, known as Burroughs Unitized Flexi Steel Shelving, which is now in production. Each individual unit is complete

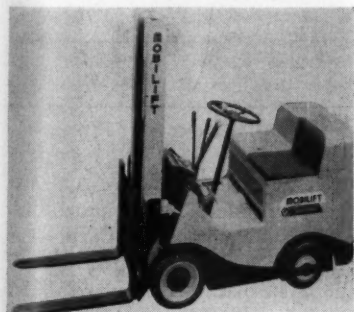


within itself. No part depends on unit next to it. Any unit can be moved independently. You can move any shelf within a unit without disturbing shelves in adjoining units. Entire unit is quickly and easily assembled. A new heavy gauge shaped post for open shelving gives added strength. A new 1-piece closed upright for closed shelving—only one piece to handle—no bolts—saves erection time.

Circle 14 on Card Facing Page 49

Mobil-Matic Drive

Newest addition to the Mobilift line is the M-324 fork truck with a capacity of 3000 lb at 24 in. load center. The M-324 is an addition to the line manufactured



by the Lamson Mobilift Corp. A feature of the M-324 is what the manufacturer calls Mobil-Matic Drive—a heavy-duty, oil immersed, multiple disc clutch, a constant mesh transmission and a fluid coupling. According to the

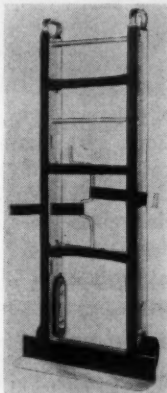
manufacturer, the Mobil-Matic Drive transmits power smoothly from the engine to the drive wheels with maximum efficiency and minimum wear on the engine, clutch and other components of the unit. There is no clutch pedal, just a push-pull forward-reverse lever, an accelerator and brake pedal. The truck has two speeds forward and two reverse. The new model also has the Hydra-Lizer, which consists of equalizers mounted on each rear wheel and connected hydraulically to cross compensate the truck when the front or rear wheels pass over bumps or depressions.

Circle 15 on Card Facing Page 49

Three New Models

The latest additions to the Escort line of appliance trucks are three new models made of magnesium, Model M-2-S-T, shown here, has Escort's roller bearing Crawler tread and patented strap tightener. They are reported to be 33 1/3 per cent lighter than steel and 16 2/3 per cent lighter than aluminum. This tread enables the operator to easily move appliances up and down stairs, over obstructions without lifting. Front of trucks are felt padded. Manufactured by Stevens Appliance & Truck Co., the trucks have 1/4 ton load capacity.

Circle 16 on Card Facing Page 49



4-Wheel Dragline Truck

A new 4-wheel truck for use in overhead and in-floor truck dragging systems has been announced by Lewis-Shepard Products, Inc. Design features which make this truck especially suited to dragline systems are the adjustable drop pin which makes engagement and release from dragline extremely easy; the deck is constructed of tongue and grooved, kiln-dried hardwood and is pro-

tected on all four sides by structural steel; all wheels are rubber tired, with metal hubs; sealed bearings in both caster and main wheels require no periodic lubrication—once-a-year flushing is only lubrication ever required;

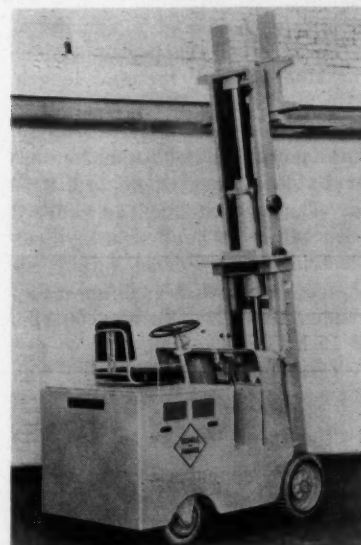


swivel action of caster operates on two rows of balls, running is hardened raceways—provides longer caster life and easier swiveling.

Circle 17 on Card Facing Page 49

5,000 Lb Capacity

A 5,000 lb capacity, electric powered fork truck, introduced by The Elwell-Parker Electric Co., features contractor controls, worm



drive, caster trail axle, packaged unit assemblies, and a rocker arm tilt. Additional features include front wheel drive, rear wheel steer, a tilting, telescoping mast, and center control.

Circle 18 on Card Facing Page 49

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DA

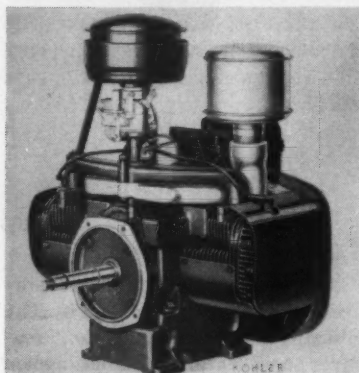
New

PRODUCTS

Continued from previous page

Direct Mounting Engine

Kohler Co.'s K660 heavy duty, 2-cyl opposed engine is being offered in a direct mounting model designated as the K660P. It may be ordered with three different



mounting pads and a variety of power take-off shafts. Dimensions for Model K660P include: length, 22½ in.; width, 23⅛ in.; height, 27 9/16 in., and weight, 225 lb. The power take-off shafts are available in lengths up to 6 9/16 in. The engine may be ordered with either a hand crank or an electric start. Power output for the new air-cooled, gasoline model ranges from 26.8 hp at 3600 rpm to 15 hp at 1800 rpm.

Circle 19 on Card Facing Page 49

Palletizing Press

A new concept of palletizing press design, the Pallet Packer, has been developed by The American Baler Co. Need for a tensioning tool in tightening banding wires has been completely eliminated. An operator merely passes bands around the load, pulls them snug, and attaches clips while the platen is exerting pressure. Releasing the platen allows the clipped bands to securely tighten.

As a result, the user is assured of constant uniform loads. Fully adjustable push button controls

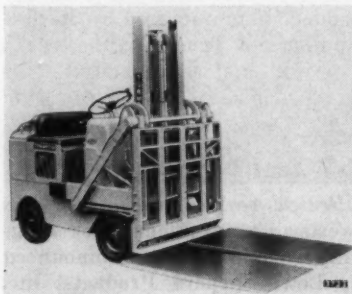


can be set for floor level operation, with materials trucked directly on or off, or it can be raised to conveyor height if production line methods dictate such procedure.

Circle 20 on Card Facing Page 49

Eliminates Standard Pallets

A new handling device, called the "Tow-Loader," makes it possible to use thin pallet sheets in place of the conventional fork entry type pallets used in handling unit loads.

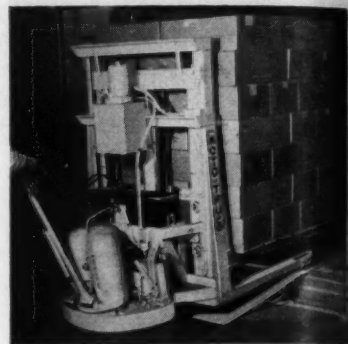


Consisting of a modified Tow-motor Unloader Accessory with a gripping device built into the pusher frame, the Tow-Loader pulls the palletized load onto either blades or forks and pushes it off at set-down points.

Circle 21 on Card Facing Page 49

Eliminates Hang-Up

Moto-Truc Co. announces a Jack Knife action truck which increases optional range of standard outrigger type high-lift trucks. Low underclearance of outriggers on standard trucks

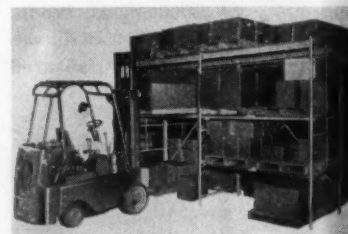


cause the trucks to hang up, reducing its effectiveness to level surface operations. The Jack Knife feature eliminates this hang up. It consists of a repositioning of the truck frame by means of a hydraulic pump and ram unit. The truck frame is raised to give sufficient clearance. The feature is optional on the complete line of Moto-Truc high lifts, or can be installed on trucks presently in operation.

Circle 22 on Card Facing Page 49

Pallet-Rack System

A new type of pallet-rack system, which increases storage



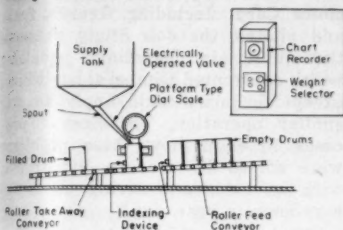
space at little additional cost, has been introduced by Brainard Steel Div. of Sharon Steel Corp. The new pallet-rack is built around one basic part: A unique tubular steel frame. Shelving bars, and connectors provide a slip-fit connection between frames. Two men can easily assemble the rack using an ordinary wrench for fastening cross braces. No cutting or fitting of parts is necessary. Racks can be erected two, three,

or four pallets high—as high as a lift truck will reach—and extended indefinitely in length.

Circle 23 on Card Facing Page 49

Automatic Tare Weight

Richardson Scale Co. has developed a new automatic tare-weighting system that is claimed to eliminate the smallest overages and underages. The system permits finer process control—a drum, can, cylinder or box is automatically tared and then filled with

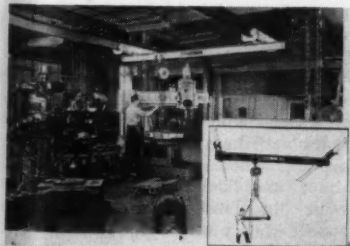


the product until a selected weight is reached. The precise weight of the product in the container is then recorded or printed for permanent record. Over-under control may be applied, if required. With this control, the process automatically would shut down when an overage or underage occurred.

Circle 24 on Card Facing Page 49

Push Type Cranes

Industrial Crane & Hoist Corp. announces a new expanded line of Push-Type Cranes with new, improved construction features. A light-duty model is available in



five different capacities and a heavy-duty model available in seven capacities. The heavy-duty models feature precision manufactured end trucks. The underhung heavy-duty cranes are equipped with forged steel wheels with removable head axles. All Industrial heavy duty cranes are available in various spans.

Circle 25 on Card Facing Page 49

Pulpwood Loaders

Two new pulpwood Loaders featuring increased reach and greater load capacity are available from Hyster Co. These pulpwood loading attachments are designed for use with the Hyster Models

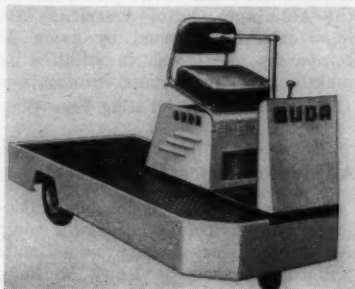


RC-150 and SC-180 lift trucks and make possible the faster, more efficient loading of pulpwood logs from yard storage, rack cars and barges. Additional advanced features include greater maneuverability, greater reach on tilt and ease of operation under adverse ground conditions.

Circle 26 on Card Facing Page 49

2,000-lb Platform Truck

The Buda Co. announces development of the new 2000-lb capacity platform truck (Chore Boy), Model CB-20. It is powered by a

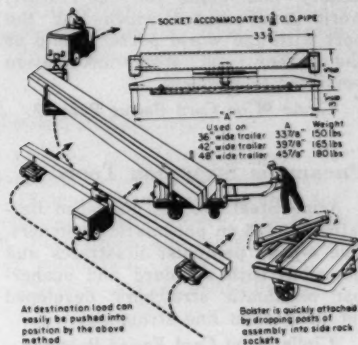


heavy-duty, 2-cyl, air-cooled engine rated at 13.6 hp. Features of this new 2000-lb Chore Boy include: Quick-change clutch, which can be changed in 30 minutes; differential hypoidal gears, which eliminate chains and allow a shorter turning radius; hydraulic brakes, with fully enclosed, self-adjusting, hydraulic type in both drive wheels; safer steering; dead man brake, and a choice of pneumatic or cushion tires.

Circle 27 on Card Facing Page 49

Handling Long Loads

A swivel bolster assembly has been developed to solve the problem of handling loads which are too long for a single trailer, such as aircraft sections and assemblies, lumber, pipe, castings and fabricated products. Mercury Mfg. Co. is producing this attachment. It consists of two identical assemblies, each of which can be easily attached to a single castor steer trailer by inserting posts into the standard side stake



pockets. Lengthy loads supported by bolster assemblies can be snaked through narrow doorways and around corners by pulling the lead trailer with a suitable tractor and guiding the rear trailer.

Circle 28 on Card Facing Page 49

Prefabricated Truck Bodies

New prefabricated truck bodies made of aluminum in eleven standard lengths and three body styles can be unpacked and assembled by two men, ready for mounting upon a truck bed, in two hours or less, states Andrews Industries, Inc. Design features include interlocking aluminum extrusions at four corner posts and along entire



roof edges. Simple tightening of bolts cause sections to snap into locking position in accurate body alignment.

Circle 29 on Card Facing Page 49

FREE

Literature



Port of Los Angeles

The Port of Los Angeles has issued a brochure which lists port facilities, history and plans for the future, world trade routes which link the port with 250 world ports, a map of the harbor, and other information pertinent to shippers.

Circle 30 on Card Facing Page 49

Pneumatic Strapping Tools

Acme Steel Co. has published Bulletin AD-146 on pneumatic stretchers. The 4-page pamphlet illustrates and describes both standard and pusher-bar pneumatic stretchers, developed for production line strapping.

Circle 31 on Card Facing Page 49

Storage Batteries

A 20-page booklet, Edison Nickel-Iron-Alkaline Storage Batteries for Industrial Trucks, which provides electrical data, and weights and dimensions of all standard battery assemblies has been announced by Edison Storage Battery Div., Thomas A. Edison, Inc.

Circle 32 on Card Facing Page 49

Electric Industrial Trucks

Electric trucks, ranging in capacity from 1,000 to 100,000 lb are described in a 12-page booklet available from Yale & Towne Mfg. Co. Cut-away photographs and diagrams show outstanding features of the trucks. A specifications sheet provides full data on performance and engineering characteristics.

Circle 33 on Card Facing Page 49

Motor Service Point List

A 24-page, 2-color point list is being distributed to customers of Spector Motor Service. All of the west and eastbound points serviced directly by Spector or by Spector and one connecting carrier are shown in the new guide. Every one of the thousands of points are coded to show the servicing terminal. Direct points are listed in a contrasting type face list will be revised every nine months.

Circle 34 on Card Facing Page 49

Free Space Wheel

A Space Wheel, which enables the user to tell at a glance how to save warehouse space, is available from Lewis-Shepard Products, Inc. The chart shows the aisle width requirements for right angle stacking with all type L-S fork trucks, area devoted to aisles in square feet, and savings made possible in cubic feet of storage space.

Circle 35 on Card Facing Page 49

Highway Policies

A digest of policies recommended by the National Highway Users Conference has been published by NHUC. It includes information on planning, federal aid, taxation, financing, safety, reciprocity, uniform laws, sizes and weights, and other aspects of highway transportation.

Circle 36 on Card Facing Page 49

Profitable Trucking

A new 52-page book describing cost saving experiences with aluminum truck bodies has been published by the Aluminum Co. of America. Savings data experienced by some 30 companies are listed, in addition to maintenance and repair information.

Circle 37 on Card Facing Page 49

Adjustable Dock Ramp

Details of a manual floating 10,000-lb capacity hydraulic adjustable ramp for loading docks are provided in a bulletin released by Rowe Methods, Inc. This equipment, known as the Commercial Adjust-A-Dock, Model 8MF, permits quick adjustable loading platform and truck floor.

Circle 38 on Card Facing Page 49

Transport News

Vol. 1, No. 1 of the Yale Transporter has been published by the Yale Transport Co. The initial issue is devoted to descriptions of the new \$1 million terminal in New York, a brief company history, and an outline of Yale's 2-way radio dispatching system.

Circle 39 on Card Facing Page 49

Department Store Study

Gimbel Brothers' Pittsburgh department store is the subject of a Certified Survey published by Towmotor Corp. Including figures, facts and photos, the Job Study presents the materials handling problems which confronted Gimbel's, but which, except for size, could apply to any similar operation. The Survey proceeds to show how these problems were solved by modern lift trucks, with an attendant saving of 30,000 man-hours a year.

Circle 40 on Card Facing Page 49

Aisle Width Determination

A discussion of How Trailability Determines Tractor-Trailer Aisle Widths is the subject of a folder offered by Mercury Mfg. Co. Setting aisle-widths to take advantage of maximum floor area without interfering with materials handling is a consideration in these days of high cost per square foot.

Circle 41 on Card Facing Page 49

Aluminum Industrial Trucks

A data file, produced by Magnesium Co. of America, describes the weight, flexibility and caster advantages of the company's aluminum industrial trucks. Truck weight is cut through use of special high-strength, low-weight aluminum alloy extrusions that serve as the truck bed as well as the frame. Other features described are torsionally flexible construction which makes the entire truck act like a spring and thus keeps all four wheels on the ground at all times, and lifetime-lubricated casters with big Timken tapered bearings spaced far apart for freedom from binding.

Circle 42 on Card Facing Page 49

Warehouse Handling

Nutting Truck and Caster Co. has released an 8-page bulletin featuring Tow Line Systems for "production line" handling in warehouses and freight terminals. Illustrated are 13 models of floor trucks, with five different types of towing mechanisms.

Circle 43 on Card Facing Page 49

For prompt service, use the postage-free postcard provided here for your convenience in securing **FREE LITERATURE** and **NEW PRODUCTS** information described in this issue of **DISTRIBUTION AGE**. All material **FREE**, unless otherwise noted, as in the case of text books and some pamphlets.

More Power To You

More Power To You is the title of a pamphlet issued by Clark Equipment Co. describing its series of Powerworker "26" trucks. Included are pallet trucks in 4,000 and 6,000-lb capacities; platform trucks of the same capacities, and a tilting fork stacker in 1,500, 2,000, 2,500, and 3,000-lb capacities.

Circle 44 on Card Facing Page 49

Exhaust Purifiers

OCM Catalytic Exhausts for removing harmful exhaust fumes from internal combustion engines in both industrial and commercial equipment are described in a new folder published by Oxy-Catalyst, Inc. The exhausts are designed for engines burning diesel, LPG or non-leaded gasoline. Types of equipment which can benefit from OCM Catalytic Exhausts, and some examples as listed in the folder, are: In-plant equipment (materials handling trucks, power sweepers, portable welders and stationary engines); mining and construction equipment (diesel locomotives, shuttle cars, dump trucks, tractor shovels, bulldozers and graders); diesel-powered boats and barges; and over-the-road diesel or LPG trucks and buses.

Circle 45 on Card Facing Page 49

Automatic Staple Tackers

A complete line of automatic tackers and Duo-Fast staples are described in a 23-page booklet from The Fastener Corp. Three new models released earlier this year are included: HT-100 Broad Staple Hammer Tacker, CT-851-OC Outward Clinch Stapler, and the new Duo-Fast Air Pliers.

Circle 46 on Card Facing Page 49

New Shipping Container

This fact-filled folder explains and illustrates all of the basic features of the new Ply-Fold crate manufactured by Atlas Plywood Corp. The crates are shipped to users partially assembled, cutting down on storage and handling. Also, they can be closed quickly by new heavy-duty staple guns.

Circle 47 on Card Facing Page 49

Safety Treads

"How to Make Stairs and Walkways Safe" has been published by the Wooster Products, Inc. to acquaint building owners, operators, maintenance supervisors, installers and others on the fundamentals of stairway safety. Various techniques are described for repairing stairs.

Circle 48 on Card Facing Page 49

Traveloader Bulletin

The Traveloader, a unique side-loading lift truck designed to handle long, bulky loads is described in a new bulletin just released by Baker-Raulang Co. The Traveloader system of handling is explained with photographs and drawings showing how the machine cuts aisle requirements.

Circle 49 on Card Facing Page 49

BOOKS

Custom House Guide

Extensive revisions in customs regulations and tariffs are included in the 1954 edition of *Custom House Guide*. The new edition provides the latest United States rates of duty in accordance with all Acts of Congress, Trade Agreements, and other measures affecting foreign trade and foreign traders. An original, time-proven system of applying each rate against each of the 30,000 commodities in the Alphabetical Index and against the appropriate paragraph in the Tariff Act (1930) and Internal Revenue Sections, is an extremely valuable feature of the *Guide*.

Maintaining the *Guide* on a current basis is its monthly supplement, *American Import & Export Bulletin*, which automatically is received by all *Guide* subscribers. The *Bulletin*, which publishes latest laws, regulations, and foreign trade opportunities, also includes various articles and features of direct interest to the foreign trader. In addition, a Readers' Service Dept. is maintained for subscribers. Published by *Custom House Guide*, Box 7, Station P., Custom House, New York 4, N. Y., 1952, pp. \$25.

Hoist Classification Chart

The Hydraulic Hoist & Steel Dump Body Manufacturers Assn. has compiled this chart to provide a means of standardizing the capacity ratings and as a convenient method for comparison of hoists manufactured by the Assn. members.

Circle 50 on Card Facing Page 49

Packaging Developments

Improved product protection, extra display value and lower packaging costs are three benefits of new developments in package design shown in the latest issue of *PACKAGE LABORATORY NEWS*, quarterly publication issued by Hinde & Dauch.

Circle 51 on Card Facing Page 49

Welded Steel Barges

All types of welded steel barges for river and harbor use are described in a 28-page illustrated booklet just published by Dravo Corp. More than 50 illustrations are included in the new publication.

Circle 52 on Card Facing Page 49

Airfreight Service

A Job Study from Towmotor Corp. made at the Chicago terminal of American Airlines illustrating the contribution of fork trucks in speeding the handling of air cargo. This Certified Survey indicates a 50 per cent increase in storage capacity.

Circle 53 on Card Facing Page 49

MH Equipment

A new 48-page catalog is announced by Palmer-Shile Co., materials handling equipment manufacturers. New products described in the book include steel boxes with lap joints, a new nesting-stacking box, a coil handling stand and reel, and skid box with door.

Circle 54 on Card Facing Page 49

Ratchet-Lever Hoists

A bulletin on Safety-Pull Ratchet Lever Hoists is available from Coffing Hoist Co.. It describes Coffing's entire line of ratchet-lever hoists, including roller and coil-chain models, with capacities from $\frac{3}{4}$ ton to 15 tons.

Circle 55 on Card Facing Page 49

Construction Tips

"Nine Profitable Minutes for Contractors" is the title of an illustrated booklet published by Hyster Co. as a key to how contractors can increase productivity of new or used tractors by adding the right attachment.

Circle 56 on Card Facing Page 49

... Battery Room Layout

(Continued from Page 41)

2. Racks to hold batteries during charging and storage.
3. Charging equipment (motor generator sets or circuit chargers).
4. Maintenance instruments and tools (hydrometers, voltmeters and thermometers, etc.).
5. Battery washing facilities (wire brush, grease, neutralizing solution, rags).
6. Distilled water source.
7. Cleaning hose (water, air or both).
8. Small office.
9. Work bench.
10. Spare parts.
11. Repair equipment (cell pullers, arc welder, drills, etc.).
12. Safety equipment (rubber gloves, aprons, goggles).

In laying out this equipment, the main considerations are safety, reduced handling and working convenience.

Operation Considerations

The first operation for most shops is to remove the battery from the truck. A 2-ton hoist, with a spreader bar, mounted on a monorail is the best equipment for this job. The monorail should cover the racks and run the length of the shop, so that batteries can be moved easily anywhere in the shop. If a fork truck or walkie is used, more space must be allowed for the trucks to operate.

Just as the battery shop is the core of the materials handling operation, the charging racks are the core of the shop. When locating the racks, make sure that attendants will be able to move around them and reach all batteries easily.

Racks should be long enough to provide space for the maximum number of batteries to be charged at one time, allowing for handling space between batteries. The racks should be about the width of the battery and of a height that will bring the tops to a comfortable working level.

Mount separate charging leads for each battery-space on the rack. Avoid long leads because they cause power loss.

Because charging and simple check-ups are the most frequent maintenance operations, reduce battery handling by doing these jobs in the area nearest the battery changing point. Install the charger control panel close to the charging equipment without making it difficult to move them.

The charging rectifier or motor-generator set usually does not require attention during battery maintenance. But, for its own maintenance, it should be accessible to electricians and should be close enough to the

control panel to allow reasonably short wiring connections, as shown in Fig. 2.

Provide a cabinet to hold maintenance tools and instruments such as hydrometers, voltmeters, thermometers, etc. Convenient location of tool cabinet and charger control panel reduces maintenance time and motion.

Mount the distilled water container on a wheeled cart or on the overhead monorail to eliminate lifting. Keeping distilled water above the cell makes it possible to water batteries merely by opening a valve on a rubber hose instead of by pouring.

Batteries ordinarily are cleaned only once a week, so the cleaning hose need not be next to the battery changing area. If water cleaning is employed, make sure to locate hose and sink so that there is little danger of splashing water onto parts which may corrode, or on sensitive equipment. Air-hose is effective for drying.

A small office should be set up to keep complete battery records and schedule maintenance.

Major Repairs

Smaller shops often take care of major battery repairs by returning the batteries to the manufacturer or to his local service station. If the plant shop does its own battery repairing, allocate space for spare parts, work bench, and repair equipment. The repair area need not adjoin the area where the batteries are removed from trucks, but should be reached by the hoist.

The work bench should be 2½ ft wide, 10 ft long, and have a heavy-duty vise mounted securely on one end. A part of the bench should be covered with a clean rubber mat, rather than wood, on which acid-soaked parts can be placed for examination without damaging the bench. Store spare parts—such as cell and tray containers, connectors, covers, etc.—in shelves about 3 ft wide. If the shelves are mounted 6 to 8 ft above the floor, this storage space will not become cluttered with miscellaneous material.

In large battery shops, the list of repair equipment includes lead burning equipment, putty knife, cell puller, moulds, drills, compound knives, thermometers, hydrometers, voltmeters, etc. Most battery shops do not have such extensive equipment. In any case, all repair equipment should be kept in one wall-mounted cabinet near the work bench.

Here are some ingenious methods of battery-handling reported by our users.

Packard Motor Car Co. uses a trailer towed by an industrial truck,

King Size Container



Corrugated container being used by Rohm & Haas for shipping 2000-lbs of granular chemicals from its Bridesburg, Pa., Plant. Made by Caylor Container Corp., the new unitized package has developed important savings in materials handling

shown in Fig. 3, to take charged batteries to the equipment. A hoist mounted on the truck facilitates changing batteries on the job.

A large mid-western company has designed a special skid to deliver charged batteries to trucks on the job. The skid has a bed of rollers mounted in anti-friction bearings, and the trucks have rollers in their battery compartments. The discharged battery is rolled out by hand onto the skid. The charged one is rolled in and the skid, carried by walkie or fork-truck, is returned to the central battery-room for recharging, as shown in Fig. 4.

A special battery handling yoke-hook, shown in Fig. 6, is used at a large railroad terminal. There, batteries must be removed horizontally, and both end and top clearance in the compartment is tight. Batteries can be changed in three minutes with this rig.

Another useful battery handling device is shown in Fig. 5. A 4-ft section of roller conveyor forms a bed on which batteries can be rolled in charging operations, avoiding the need for an overhead crane or hoist.

Fig. 7 shows a battery room where low-head room was a problem. Batteries of different size are handled by a special spreader bar with two sets of hooks; the inside set being used for small batteries.

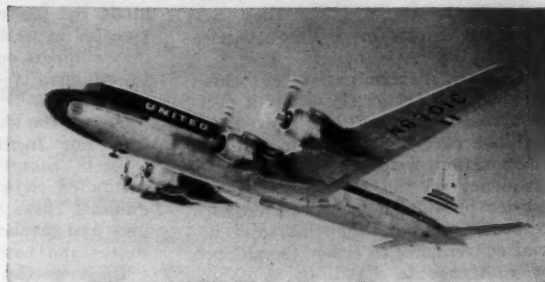
These suggestions are intended only to serve as a guide. The employment of an experienced person for battery maintenance usually will do much to bring more ideas and efficient operation. Finally, consultation with battery and equipment manufacturers should not be overlooked. They are anxious to have their equipment do a good job, and will do much to aid in the establishment of a good maintenance program.*

(Resume Reading on Page 42)

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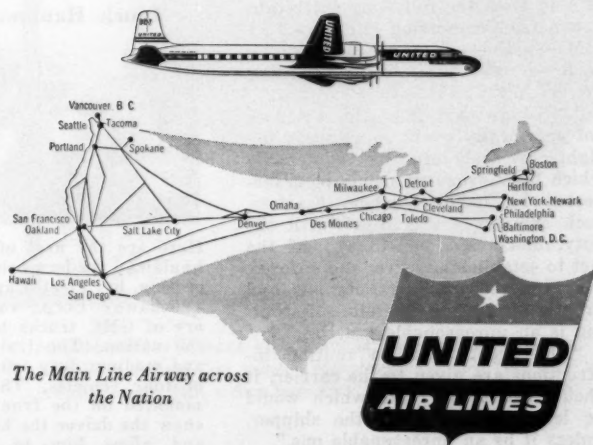
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Successful Routing . . .

(Continued from Page 25)

the same in their tariffs.

The division of revenue between the carriers is a matter of mutual agreement, usually based upon some prorated factor such as mileage or rate.

The use of the direct service route as opposed to the indirect service route is a question which has been argued and discussed by freight solicitors from coast to coast, depending largely on whether they are soliciting direct, or indirect service freight.

Actually, determination of which provides the better service is a decision based on localities involved, individual carriers and their methods of operation, weight of the shipment, frequency of the movement, overall service provided by the carrier with respect to other shipments, and actual convenience to either the shipper or consignee in handling the shipment.

Many large carriers operating over long distances handle shipments much the same as two carriers would, actually transferring to themselves at breakpoint terminals.

Other carriers handle shipments directly through. Still others try to maintain what is known as a balanced run operation. The selection of the most advantageous route is usually a result of past experience with the particular carrier, as well as knowledge of the above information.

Unless a shipper is well aware of the routings which he uses and, unless he desires to maintain a most intimate control over his shipments, it is sometimes more advantageous to give his freight to the initial motor carrier completely unrouted.

It then becomes the duty of the motor carrier to forward the shipment via the cheapest route as can be seen from the following Interstate Commerce Commission citation:

M— S— R— Co., v. H—
L. R—, dba as D— Forwarding
Co., 47 M.C.C. 151.

"Although part II of the Act does not specifically grant to shippers the right to designate the routes by which their property should be transported by motor common carriers, such carriers are charged with the duty, under section 216 (b) of the Act to establish, observe, and enforce, just and reasonable regulations and practices relating thereto. Misrouting is an unreasonable practice.

"And even, when no routing instructions are given to the carrier, it should select the route which would be least expensive for the shipper, unless it be an unreasonable one."

Compare also T— Transporta-

tion Co. v. S— Chemical Co., 148 Fed. 2nd 777, wherein it is stated that if an interstate motor carrier promises to select the cheapest available rate and route, and to ship merchandise accordingly, and fails to do so, it is liable to the shipper in damages for the difference between the rate charged and the cheapest applicable and available rate.

To insure that motor carriers abide by the ethical practices enumerated in section 216 (b) of the Act, may shippers employ freight auditors to examine their freight bills for overcharges.

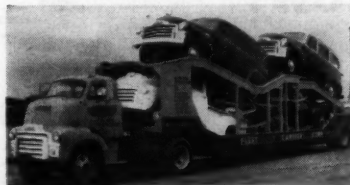
To aid the shipper who has neither time nor facilities for determining through routes and rates from the tariffs, carriers often provide routing guides. These incorporate point listings and carriers with whom through routes and rates are protected.

Used in the actual localities for which the guides were designed, a shipper will find them fairly reliable. However, whenever one crosses a state line the guides are subject to various restrictions and exceptions, and become misleading.

In determining routes, it should be remembered that through rates do not necessarily follow because of a through route. Carriers enjoying facilities for interchange of traffic in the same city will often protect through routes but, for one reason or another, will not protect through rates.

Since cost is one of the most important determining factors in the selection of through routes, one should endeavor to specify the routings which will protect the lowest rates. In the event that this routing is unknown, the shipment should be

Truck Haulaway Trailer



Here are the first of the new truck haulaway trailers being placed in operation by Fleet Carrier Corp., and Truckaway Corp., to improve delivery of GMC trucks to dealers across the nation. The trailers carry light and medium duty trucks, a maximum of four vehicles. The tiny antennas mounted on the front of the trailers show the driver the height of his load and allow him to check doubtful clearances before proceeding

Mechanized Mop



Cutting tunnel cleaning time at the new Broadway Tunnel, San Francisco, from 128 to 4 manhours has been accomplished by a 4,000-lb gasoline fork truck equipped with a special washer attachment

delivered to the original carrier unrouted.

Further, carriers are bound by shippers' routings, even though they are not via the most economical route.

However, for the shippers' own files, it might be well to determine from the initiating carrier prior to making an unrouted shipment just what is the most economical and serviceable route available, and upon learning this, to make a record of such for future shipments.

These routings must be checked periodically to insure against cancellations or changes in the routing provisions. Ordinarily, however, when a through rate is established by a motor carrier with a through route, that rate will not be cancelled (other than for increases or decreases or revisions) as long as the through route is maintained.

While the Commission does not have the authority to instruct motor carriers to protect through routes and through rates, once the carrier does, he cannot cancel out from his concurrence unless he breaks the through route as well as the through rate.

Successful route determination is the result of careful tariff study and years of experience. The shipper or traffic manager should avail himself of the knowledge of routing held by reliable motor carrier personnel. Motor carriers will be more than willing to review a shipper's problem, and give him the benefit of experience and knowledge of tariffs in the selection of the best available routes. •

(Resume Reading on Page 26)

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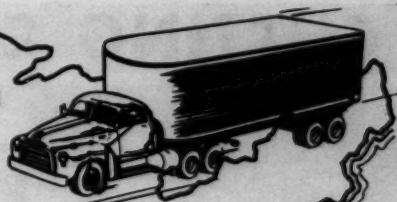
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CUTTING COST



HIGH STACKING for down-to-earth savings!

Tremendous savings are being made by a well-known brewer with Towmotor Fork Lift Trucks. High stacking increased usable storage 32%, material flows faster to-and-from production, truck loading is 28 times faster, and the highway truck fleet was reduced 15%. Such savings are yours with Towmotor **Mass Handling*. Have a Towmotor *Mass Handling Engineer* analyze your material handling needs, or write for, "How To Catch Man-Hour Thieves." TOWMOTOR CORPORATION, Div. 1908, 1226 East 152nd Street, Cleveland 10, Ohio.

*TOWMOTOR MASS HANDLING—Moving more units faster, at lowest cost!

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Exploring . . .

(Continued from Page 21)

The cost advantage in such transportation service actually lies with the railroads, but under present regulation this cannot be translated into price advantage. This calls for re-examination of the conventional methods and patterns of freight rate making, and the use of what may now be regarded as unusual bases.

Some of these are the making of agreed charges or negotiated contract rates for any and all shippers under certain conditions; encouraging full car-loading by rates based on the stowability or loadability of the freight; and making of special reduced rates conditioned upon the quantity of freight transported within a period of time.

Numerous other ways of adapting service to modern distribution requirements have been suggested by students of rate making for a number of years, but regulation has slowed or prevented their adoption. It is only being realistic to bear in mind that total transportation cost is a much larger item than simply that of the line-haul movement.

Railroad men should learn the difference between sound theories of pricing (rate making) applicable under the bygone conditions of transportation monopoly, and those which now apply under intense competition not only with other type carriers but with private operators of trucks, barges, steamships and aircraft.

Moreover, the railroads should be better able than they now are to explain persuasively to shippers, receivers and regulatory authorities the public interest in a modernized rate policy. By the same token, railroad men should work just as hard to get rid of all traffic not able to make use of their inherent advantages.

Improved Service

If they are not to lose the force of inherent advantages, railroads must continually make their service more attractive to users by eliminating unnecessary detention of cars, and by improving the quality of their equipment to reduce loss and damage and packing costs.

They must also continue to intensify their efforts for greater operating economy with the objective of passing along at least a part of their increased economies to those of their customers who will thus be encouraged to increase the volume of their patronage.

What many seem unable to realize, when discussing the inherent advantages of railroads over other types of carriers, in the movement of all types of traffic, and the various ways in which such advantages may be preserved, is the fact that all will be for naught if the crisis now facing rail-

roads in capital is

Our government's tremor the great to deterioration when set to cost

Those valiant users and dangers. have so their pro supply.

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AUGU

DISTRIBUTION AGE

54

roads in the obtaining of private capital is not met promptly.

Our government will not permit the tremendous railroad plant, one of the greatest resources of the country, to deteriorate or be placed in a position where it will cease being an asset to commerce and defense needs.

Those aware of this have made valiant efforts to arouse railroad users and regulators to the inherent dangers. But the railroads themselves have so far been unable to present their problems in terms of capital supply. They have made appeals, when discussing rate regulation or the protection of their inherent advantages in competitive situations, on such abstract bases as fair, reasonable and just, about which it has been said that "every man has either a different opinion or no concept at all."

Investment Capital

Everyone, however, can understand such a thing as needing a supply of investment money in order to keep properties equipped in a modern manner, and of sufficient capacity to meet reasonable service demands.

A different approach is now called for in convincing regulatory, administrative, and legislative bodies that it is time to ease their controls to the extent required to enable the industry to attract the necessary investment capital. Otherwise, it will have to be sought from the Federal Government.

There is no other alternative but this will be the first step toward nationalization of transportation in this country, and would merely substitute for the present policy of duplication and confusion one of deterioration and decay.

In the last analysis, if we are to preserve and take full advantage of the inherent advantages of railroad as well as the other forms of transport, what is needed is a unified and coordinated transportation system operating in a proper regulatory environment under a single transportation authority created by Congress for that purpose. •

(Resume Reading on Page 22)

Trucking Spectacular



Considered to be the largest spectacular ever built in the truck industry is this 75-ft. three-dimensional sign on the top of the new million-dollar terminal the Yale Transport Corp. has just opened in New York



Typical packaged-materials-handling installation. Farquhar Conveyors stack, pile, store or move packaged materials from floor to floor faster and easier . . . make elevators unnecessary . . . cut your materials-handling costs to the bone.

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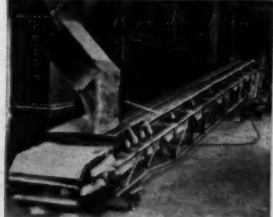
Sure, there are probably some things that Farquhar Conveyors can't handle—like elephants, or battleships. But by and large, no matter what your conveying problem, Farquhar Conveyors can solve it. AND solve it at the *lowest cost, greatest possible efficiency, and smallest possible upkeep!*

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Frozen Concentrates . . .

(Continued from Page 35)

One of the most serious problems is failure of refrigeration equipment in a warehouse in which concentrates are stored. If during such a breakdown temperatures of the cold storage rooms rise to 10 deg F, there is danger to the product. If temperatures rise to 12 to 18 deg, the product is frequently ruined.

Even when the concentrates are held in terminal warehouses at proper temperatures and leave there in acceptable condition, there is a further problem of delivery to retail stores without temperature losses.

There has been a strong trend toward use of trucks equipped with holding coils, but even this method does not always keep temperatures low enough on long delivery runs in hot weather. The holding coils are usually reinforced by dry ice. Warehouses which have their own trucks and experienced crews have been the most successful in meeting requirements.

Truck vs. Rail

Railroad transportation of concentrates from producer's plant to terminal warehouse also has had its prob-

lems. Until recently trucks had taken over a large part of this business.

Truck shipments for long distances are more costly, but salt and iced cars have not been uniformly successful in keeping temperatures low enough.

With the introduction in the past two or three years of mechanically refrigerated cars, the railroads are getting back a share of the business they had lost.

At the end of 1953, Fruit Growers Express, Western Fruit Express, and Burlington Refrigerated Express Co. jointly owned 305 of these modern cars and had an additional 151 on order.

Mechanical failures in the refrigerated cars are infrequent, but to guard against them and to repair them quickly when they occur, Fruit Growers Express has built a staff of service engineers stationed at strategic points throughout the country. Thus damage to frozen concentrates en route to terminal warehouses has been minimized.

The cooling of orange concentrate begins when it leaves the evaporators in the processing plant for the packing room. Its temperature as it

leaves the evaporators is usually about 70 to 80 deg, F, but it retains this high temperature only for a few minutes.

It goes immediately to a vatator, where the temperature is lowered to 18 deg. It is then put in cans in a slushy condition, an operation that takes only a few minutes. From the filling machines, the concentrate is moved quickly to a blast freezer, where the temperature is further reduced to zero or minus 5 deg in the can. This process takes 30 minutes.

In this freezing operation the cans move on a walking beam conveyor with a stainless steel ribbed floor to the deep freeze. An air blast of minus 40 deg is blown on them. From the cold room they are conveyed rapidly to the cartoning machines, which are in a room in which normal temperatures prevail. However, for packing they are out of the cold room for only two minutes, during which time the change in temperature of the can is immeasurable.

After being packed in cartons the cans are held in the cold room for three days, during which time the quality control department watches over them. Every batch is laboratory tested to determine whether it is up to standard.

Bacteria checks are an important factor in this checking. Samples are

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taken from the production lines as the juice is being processed. Every batch is coded so that it can be quickly located in the cold room if laboratory checks reveal any inferiority in grade.

Primary Storage

From the plant cold room the cartons are transferred to primary storage. Minute Maid operates such storage facilities at its Plymouth and Leesburg plants as the Plymouth Freezer Corp. and the Leesburg Freezer Corp. Each is a modern building with about 3,000,000 cubic feet of cold storage space within a short distance from the processing plants.

A new freezer warehouse, one of the largest of its kind in the United States, has recently been completed by the Pasco Packing Co., Dade City, Fla., one of the largest processors of citrus products in the world, which packs about 20 per cent of Florida's frozen concentrates.

The new building is 216x595 ft, with rooms 26 ft high and a 30-ft wide covered loading ramp along one entire side. Of structural steel and concrete block construction, it has 12-in. thick red brick walls which serve as fire walls between the cold storage rooms. The steel members are completely insulated and floors and walls are covered with 8 in. of Fiberglas, with 9 in. of the same insulation on the roof. To assure a complete envelope of insulation, an 8 in. thickness of Fiberglas was applied.

With 2,500,000 cu ft of space, the warehouse has room for 833 carloads of frozen concentrates. Four large storage rooms are placed two on each side of the engine room.

The refrigerating system is automatically controlled by ammonia suction temperature. Capacity ranges from 35 to 265 tons, with an average usage of about 110 tons. This keeps the four rooms of 100,000 sq ft area at about minus 14 deg F. These rooms hold 2,500,000 cases of frozen citrus juice and sections.

The loading dock of the new freezer warehouse accommodates 20 semi-trailer trucks and eight rail cars. •

(Resume Reading on Page 36)

Good Neighbor Terminal



This new freight terminal at Lyndhurst, N. J., was placed in operation June 16 by Kingsway Transports, Ltd., of Montreal, Canada. The 60-x90-ft dock area is served by 14 doors on its loading platform, and the terminal has sleeping accommodations for 20 drivers

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FORK LIFT TRUCKS

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More Operational and Service Features

- Easy to get on and off from either side.
- Spring mounted rear wheels for riding comfort.
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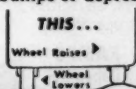
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* HYDRA-LIZER

Another Mobilift exclusive... equalizers mounted on each rear wheel and connected hydraulically to cross compensate the truck when the front or rear wheels pass over bumps or depressions.



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1113 Spring Street, N.W., ATLANTA

Circle No. 118 on Card, facing Page 49, for more information

... Solves LCL Problem

(Continued from Page 33)

It has happened that with the constantly increasing transportation rates in both the U. S. A. and Canada there has, also, unfortunately, been added severe penalties, over and above the rates themselves, in the form of minimum charges. These became so severe as to cause to be created in the U. S. A. a nationwide organization known as National Small

Shipments Traffic Conference, in which most of the larger mail order, department and chain stores in the country take an active part.

Assembly and Billing

Tormon is a similar mutual protection agency. Its function is to supervise the assembly of the contents of the cars, to attend to all the bill-

ing, prepay transportation charges and collect them from its members plus a small overhead fee, which is considerably less than the forwarding company fee.

The railroad company is given a combined bill of lading for the entire carload. This pleases the railroad since it saves several hundred dollars in the physical handling that would result were all the contents shipped in lcl consignments, involving cartage, terminal handling and, most important, voluminous billing.

Preferred Handling

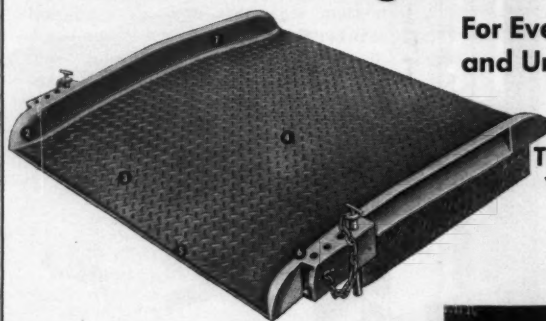
Such merchandise cars are given preferred handling in transit and make running time comparable to that enjoyed by express traffic. Already cargoes have begun moving from Toronto to Winnipeg, Regina and Vancouver. Soon to be added are Edmonton, Calgary, Moose Jaw and Saskatoon.

When western traffic gets into its stride attention will be turned toward east-bound traffic from Montreal, which will have Moncton and Halifax as main distributing centers.

For use as a collecting center to serve the Toronto area, the CPR freight station in North Toronto has been leased to Tormon. A new collecting center has been built at Montreal. Ultimately, a carload is hoped to be loaded daily at Toronto for each of the western cities served. Probably more traffic than this will be dispatched from Montreal. Each western center will distribute goods to its own surrounding territory. •

(Resume Reading on Page 34)

PENCO Magnesium Ramps



For Every Loading
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LIGHT WEIGHT
HEAVY DUTY

Outstanding In Design, Long-Life and Price

PENCO Ramps new, improved design and construction features cost you less — will give years of time and labor-saving operation. Thousands in use.

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3. Built like a bridge — all welded construction of light-weight magnesium diamond plate — prevents slipping.
4. Scientifically engineered — crowned construction to keep edges flush at different levels.
5. Beveled edges eliminate jars and jolts — protect loads and workers — save tires and equipment.
6. Penco exclusive — full-range, positive Locking Device — holds ramp in rigid, secure position.

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Rectangular or Flared Styles. Capacities from 3,000 to 12,500 Pounds. One man operation.

PENCO MAGNESIUM TRUCK LOADING RAMPS

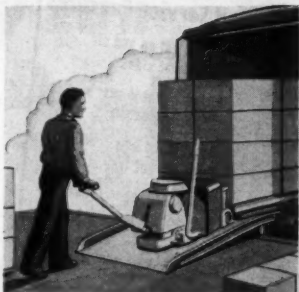
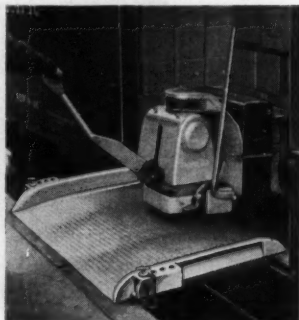
One Section or Two Section Styles. Capacities from 1,000 to 6,000 Pounds. One man operation.

PENCO MAGNESIUM YARD RAMPS
Movable, sturdy, Loading Docks. Capacities from 4,000 to 16,000 Pounds.

COAST TO COAST DISTRIBUTORS

Fully qualified with a wide experience of materials handling equipment to cooperate with your loading and unloading problems. Write today for Penco illustrated literature.

PENCO ENGINEERING CO
25 California St., San Francisco 11, Calif.



What Tare Weight?



When a Marine Corps Sergeant stationed in Indonesia shipped his household furniture back to the U. S. recently, native packers did the wrapping. The shipment of furniture was received in perfect condition at the Bayonne, N. J., Naval Supply Depot after a trip half way around the world. Packing experts at the Depot, examining the bamboo wrapping, said the shipment was perfectly protected, yet the packing weighed only a third as much as U. S. packing cases used to do the same job. Although the Navy's Bureau of Supplies and Accounts is attempting to reduce tare weight program to lessen the weight of packing containers, it is extremely unlikely that native method of shipping household goods will be used

Circle No. 119 on Card, facing Page 49, for more information

Industry Items

Mercury Mfg. Co. has appointed Associated Agents, Inc., Greensboro, N. C., as agents in North and South Carolina.

The annual report of Champion Fibre & Paper Co. shows sales up 8.1 per cent over 1953.

Shippers now are able to make advance reservations for air freight space aboard United Air Lines planes under an expanded air freight plan placed in effect by the line. The service is available on most daily scheduled passenger-cargo and all-cargo flights.

White Motor Co. is establishing a direct factory branch at Akron, O., with Robert G. Oakley as branch manager.

Union Metal Mfg. Co. has named Insley-McEntee Equipment Co., Rochester, N. Y., materials handling agent in 10 Northwestern New York counties.

Air Express International Corp. has moved its executive offices to 90 Broad St., New York, N. Y.

Richardson Scale Co. announces the opening of a new branch office in Memphis, Tenn. It also has been announced that Richardson's Atlanta, Ga., office has been moved to 423 Grant Bldg.

Contracts for a new warehouse-office building in Cleveland, O., for Economy Cash-and-Carry Co. have been awarded to Ballinger-Meserole Co., Philadelphia, Pa.

Edwards Trailer Co., Detroit, Mich., has introduced an equipment leasing plan through which it is offering to lease new trailers built to the customer's specifications.

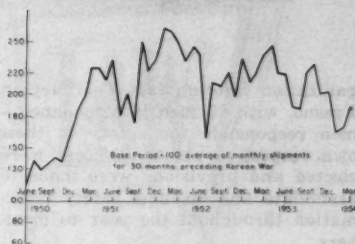
Yale & Towne Mfg. Co. has offered users of industrial trucks a "3-way finance plan," which includes purchase of equipment by time payment, a direct lease agreement, and lease with option to purchase.

Grace Line has announced a new Caribbean service freighter pier on Java St., Greenpoint, Brooklyn, N. Y. Grace also opened an office in Philadelphia to handle traffic in an out of Delaware Valley, U.S.A.

The corporate name of American Car & Foundry Co. has been changed to ACF Industries, Inc.

Delta Lines, highway common carrier serving Northern California, has been granted authority by PUC to serve between points previously served and the Greater Los Angeles area. Delta also has been admitted to membership in Transport Clearings of Los Angeles.

Shipments Index



The first quarter (1954) index of shipments of materials handling equipment released by The Material Handling Institute reveals a rising trend although shipments for the first three months of 1954 were below those of the fourth quarter of 1953. The index is based on the 30-month period from January, 1948, to June, 1950, and includes reports from manufacturers of electric and gasoline fork-lift trucks and accessories, conveyors, strapping, hoists, cranes, monorail systems, pallets, tote boxes, containers, casters and other wheeled equipment for industrial material handling. Total dollar figures from which the index is computed include more than 25 percent of the estimated annual total for the industry (\$1½ billion). The index for the average monthly shipments for the first quarter of 1954 is 173 compared with the index for the average of the fourth quarter of 1953 of 223

"Extremely pleased with appearance and workmanship"

The above comment is from a letter we received regarding a traffic exhibit coach specially built for a world famous corporation in the electric equipment field. It is a typical response to the quality which has made Gerstenslager "America's big name in custom-built vans" for the moving and storage industry.

The GERSTENSLAGER Co.

Wooster, Ohio

Established 1860



Circle No. 120 on Card, facing Page 49, for more information

AUGUST, 1954



Draw from the Nutting Library of Material Handling Helps

Jr. Catalog 54 G—General Purpose, Warehouse Trucks, Casters and Wheels

Bulletin 48 JS—Jacks and Skids for Mobile Storage

Bulletin 54 DJ—Dairy Industry Trucks

Booklet 53 SR—General Purpose Trucks and Barrel Handling Equipment

Bulletin 53 SC—Trucks for In-Plant Feeding

Bulletin 54-TL—Trucks for Use with Overhead or Under-Floor Powered Conveyors.

Nutting
Since 1891

63 years of materials handling "know-how" are built into over 1000 models of Nutting Trucks. You benefit by perfect adaptability to the job, easier handling, long life and minimum maintenance. Write for the literature that covers your problem.

NUTTING TRUCK & CASTER CO.
1220 DIVISION ST., FARIBAULT, MINN.

Export Sales Representative:
SCHTEL INTERNATIONAL, INC.
4237 North Lincoln Ave., Chicago 18, Ill.

Circle No. 121 on Card, facing Page 49, for more information

... Refrigerated Warehousing

(Continued from Page 37)

ganization meeting last February in Fresno, with 75 men in attendance—men responsible for safety in their own respective plants. Officers were elected and provisions were made to assimilate and disburse safety information throughout the year to members.

With the West acting as pacemaker on the regional level, it is hoped that other regional organizations will follow this lead and organize groups in their areas.

Although much valuable assistance can be derived from the national and regional organizations, the real spadework must be done by the individual firm. It must initiate the program . . . put it into action . . . and follow it through if results are to be attained. If you do not have a Safety Program at your plant, at present, and wish to get one started here are a few suggestions which will help you:

Program Suggestions

1. Call in our compensation insurance carrier and solicit his help. You will find him willing and able to lend

a hand—safety is a part of his business.

2. Ask for aid from your local Safety Council, they can be most helpful in supplying literature and material.

3. Be sure to let your employees know that top management is backing the program and is interested in its success.

Safety Committee

4. Appoint a Safety Committee. It should be the duty of this Committee to investigate all accidents, make plant inspections, make recommendations for physical changes and improved procedures, encourage good housekeeping and in general promote safety in the organization.

5. Make use of safety posters. Place one employee in charge of the handling of the posters. The posters should be kept on file by subjects so that they can be readily obtained for posting in keeping with local or national safety campaigns, the season of the year and subjects which the Committee may be currently stressing or to emphasize any recent type of

accident which may have occurred. Change the posters not less than once each week.

6. Use a blackboard or some other device to show the number of days worked since the last lost time accident. This can be done by departments or for the company as a whole.

7. Start a Safety Training Program. Many things can be taught, such as: How to lift properly; how to fight fires; what to do in case of an ammonia break, and the proper use of goggles.

8. Get your employees into safety shoes. If difficulty is encountered at the beginning of the program, insist that all employees who will not purchase safety shoes wear steel caps over their shoes.

9. Issue yearly "no accident award pins" to your men, it will give them greater interest in the program. The pins can be ordered from NARW.

10. Start a Safety contest to get the program off with a bang.

Crystal's Program

In many industry meetings we have told the story of our safety program at the Crystal Ice and Cold Storage Co. We have told how in a period of five years we lowered our severity rate from 2.01 to .04; our frequency rate from 110 to 13.8 and our lost ratio of medical and compensation payments to premiums from 645 to .043. Here's proof that a small plant can set up a safety program—and make it effective.

The beneficial results of a safety program are not realized over night. For some unknown reason many employers who have just started a safety program seem to run into a bad accident experience during the first few months of the program.

The difference in individual experiences is primarily due to mental attitude and alertness. The biggest job in safety is to change the mental attitude of workers. Any gimmick which will impress safety on the minds of our employees is worthwhile. We learn best by repetition.

Many indirect benefits have been achieved in our plant as a result of the safety program—a program that was made effective without a fulltime personnel director or a fulltime safety engineer. At Crystal we found that safety was the best common meeting ground for management and rank and file employees.

As we taught safety and aroused interest in safety, it was found that procedures were discussed which led to better and cheaper methods of plant operation. As employees became interested in safety and realized the resulting personal benefits, their interests in the general welfare of the company increased—with a resulting increase in efficiency and pride of workmanship. •

(Resume Reading on Page 38)

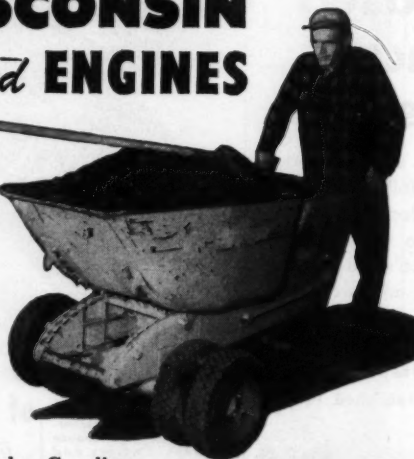
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Whether handling variable heavy-duty loads such as this half-ton, Wisconsin-powered prime mover, made by Prime Mover Co., Muscatine, Ia., or continuous, constant-load assignments . . . Wisconsin Air-Cooled Engines have the inherent "Lugging Power" that follows through when the going gets heavy.

This is the result of basic heavy-duty engineering design and construction and such features as tapered roller bearings at BOTH ends of the crankshaft; high tension rotary type OUTSIDE Magneto with Impulse Coupling; dependable, all-weather AIR-COOLING and positive lubrication.

You can't do better than specify "Wisconsin Power" for your equipment . . . available in a complete power range from 3 to 36 hp., in 4-cycle single cylinder, 2- and 4-cylinder models.



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WAREHOUSING

During recent months the higher courts handed down several unusually important decisions pertaining to ambiguous contracts involving warehousemen. Particularly for the reason that during the past months, certain warehousemen asked for detailed legal information on such contracts, I shall briefly review these important decisions.

In cases of ambiguous contracts, the courts explore the original intentions of the contractees.

An important point of law decided by a recent higher court is this: The original intentions of contracting parties determine whether an uncertain or ambiguous contract is valid and enforceable.

For instance, in *R— v. L— National Bank & Trust Co., 76 S. E. (2d) 522*, it was shown that a bank had been making to the V— Co. 80 per cent loans on warehouse receipts covering storage of glass. Later the bank decided to make no further loans. Then one R— wrote a letter to the bank, as follows:

"In connection with your granting of 80 per cent loans on warehouse receipts, covering shipments and storage of glass, to the above company, I hereby guarantee the fulfillment of these transactions in case of any difficulties."

In reliance upon this guaranty the bank made a series of loans to the V— Co. secured by warehouse receipts for glass. When the V— Co. refused to repay the loans, the bank sued R—.

During the trial R— contended that he should not be held liable for payment of the money the V— Co. borrowed from the bank, because his letter of guaranty is so vague, indefinite, and uncertain that it cannot be enforced.

However, the higher court held that R— must repay the various loans made by the bank to the V— Co. saying:

"The contract is not so vague, indefinite, and uncertain as to be incapable of enforcement. While it is true that, standing alone, the letter signed by V— and R— is ambiguous, yet, viewed in the light of the attendant circumstances under which the letter was given, the intention of the parties is easily ascertainable."

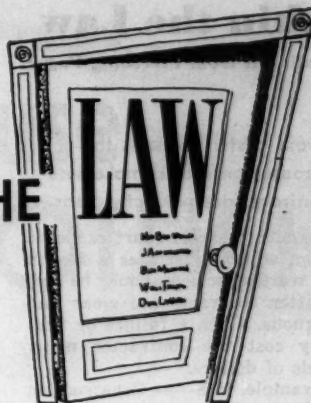
Higher courts consistently hold that ambiguous contracts must be interpreted reasonably.

Modern higher courts consistently hold that all ambiguous contracts will be interpreted reasonably. This means that irrespective of uncertain or ambiguous clauses in a contract, a ware-

WITHIN THE

By Leo T. Parker

Legal Consultant,
Distribution Age



houseman always is entitled to receive extra payment for special services rendered to either the owner of stored goods, or a tenant who rents space in the warehouse.

For illustration, in *New York v. United States, 113 Fed. Supp. 645*, the testimony showed facts as follows: The United States government, as tenant, leased from a warehouse owner 335,747 sq ft of cold storage space on four floors.

The lease provided that 252,123 sq ft on three floors were to be used for cooler storage, with temperatures ranging from 20 to 40 deg F, and that 83,624 sq ft on one of the floors were to be for freezer storage, with temperatures ranging from zero to 20 deg.

The rental fixed in the lease was \$270,000. Sometime later the tenant required additional freezer storage space and the warehouseman agreed

to supply freezer space on a floor that was specified as a cooler space in the lease.

No mention or other agreement was made of any additional rental for the freezer space. The tenant refused to pay any additional rental for the freezer space and the warehouseman filed suit for \$13,619.

During the trial the tenant introduced before the court clause 5 (a) in the lease contract which states that the warehouseman would maintain a power plant to provide cooler and freezer temperatures in all refrigerated rooms as may be from time to time specified by the Lessee.

Also, this clause provides that the warehouseman would, on request by the tenant, furnish as low temperature as the piping and equipment in any room will produce.

The counsel for the tenant argued that in view of these provisions in the lease contract, the warehouseman was obligated to supply freezer space for the cooler space without extra compensation.

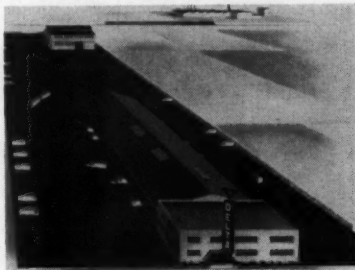
The higher court refused to agree with this argument and in holding the tenant liable to the warehouseman for additional \$13,619 rental, said:

"When the defendant (tenant) requested the additional 83,772 sq ft of freezer space on the fifth floor of the leased premises in place of cooler space then being furnished, plaintiff (warehouseman) expected to be paid the increased differential accordingly.

"Under the lease and the circumstances we think plaintiff (warehouseman) proceeded as any reasonable person would have done. The service was requested, duly furnished and plaintiff had a right to believe it would be paid on the basis of the higher rates. We believe that the ambiguity created by section 5 (a) must be resolved in favor of the plaintiff."

(Please Turn Page)

Bay Area Terminal



Delta Lines, Inc., is constructing this new terminal in Emeryville, Cal., in the San Francisco Bay area. Its 80x225-ft dock will accommodate simultaneously 26 line haul units and 20 pick-up and delivery trucks. The dock will be equipped with a towveyor continuous chain drive freight handling unit of the overhead truck dragging type

Within the Law

(Continued from Preceding Page)

To avoid costly law suits the warehouseman should make sure all contracts are perfectly clear.

Last month a higher court rendered a decision which illustrates a reason why all warehousemen should be certain written contracts are clear and unambiguous. Such a failure or neglect may cost the contractee many thousands of dollars.

For example, in *S— Construction Co. v. N— T— Co.*, 62 N. W. (2d) 201, the testimony showed facts as follows:

A contractor entered into a contract to construct a warehouse building. The plans and specifications provided that the contractor prepare for paving where shown.

During the construction work the contractor found it necessary to supply and compact a considerable amount of crushed rock to provide a suitable foundation or base on filled ground to supplant the concrete floor.

The contractor sued the building owner to recover extra payment for this work, and materials. The building owner contended that any experienced contractor should have realized that fresh fill would require rock compaction where it served to support the concrete floor of the building. Nevertheless, the higher court ordered the building owner to pay the contractor the amount of \$10,776.33, plus \$10,000 attorney's fees.

The law does not countenance a theft conviction predicated on previous convictions.

According to a late higher court decision a person accused of stealing merchandise from a warehouse cannot be convicted on testimony proving that he committed other similar thefts. In other words, proof must be given that the accused actually committed the present theft, otherwise there can be no valid conviction. The same law applies to receivers of stolen goods.

For example, in *D— v. State*, 266 Pac. (2d) 480, it was shown that one H— was arrested for committing a burglary of a warehouse. The object of the burglary was to steal merchandise stored in the warehouse.

The burglar arrived at the warehouse at about midnight and stole certain merchandise. Later H— confessed to the crime and further testified that he sold the stolen merchandise to one D—.

The latter was arrested and convicted of receiving the stolen merchandise and sentenced by the trial

The original intentions of contracting parties determine whether an uncertain or ambiguous contract is valid. To avoid all litigation in this respect, warehousemen should make certain that all written contracts are clear in meaning and unambiguous

court to a term of three years in the penitentiary and a fine of \$250.

D— appealed to the higher court and proved that during the trial testimony was given to the jury that he had in the past bought other stolen goods. In view of this latter testimony the higher court reversed D—'s conviction, and said:

"It could be possible that this defendant (D—) could be innocent of the crime herein charged and still be guilty of the other offenses. The law does not countenance a conviction predicated on other offenses, but only on the one charged in the information."

TRANSPORTATION

Under what conditions can a truck be operated for transfer of merchandise without a permit?

Considerable discussion has arisen from time to time over the legal question: "Under what circumstances can the owner of a motor truck operate it for transportation of merchandise without obtaining a license

or permit?" Last month a higher court answered this question.

For example, in *People v. H— D— S—, Inc.*, 61 N. W. (2d) 113, the testimony showed facts as follows: A state law provides that it shall be unlawful for any contract motor carrier of merchandise to operate within this state without first having obtained from the commission a permit.

The testimony showed that a motor truck was leased on a long term basis; the operation of the truck was under the complete domination and control of the lessee, except that the truck was maintained insured and serviced by the lessor in its own garage; the driver of the truck was employed by the lessor and the driver received all instructions from the lessor of the merchandise; the merchandise was transported by the lessee as part of its commercial enterprise.

The higher court held that, under these circumstances, the lessor of the truck did not operate the truck for "transportation of either persons or property for hire" without having obtained a permit. Therefore, the lessor or owner of the truck was not required to obtain a permit. The court said:

"Under the facts as stipulated, defendant H— (owner of truck) did not operate any motor vehicle for the transportation of property for hire on any public highway in the State—it merely leased the motor equipment. It retained no control, did not employ the driver who was an old employee of A— (lessee) and exercised no direction or control over him or A—."

Do insurance policy clauses wholly define the company's legal rights and the policyholder's?

Last month a higher court rendered a decision which emphasises the importance of our being very careful

(Please Turn to Page 70)

Acres of Trailers



A part of the largest private trailer order in the history of the trucking industry is shown here at Memphis, Tenn. The order was placed by Riss & Co., of Kansas City, Mo. Trailers were built by the Fruehauf Trailer Co. Riss also has purchased a record of 500 ultra-modern tractor units from General Motors, and put the fleet into action in July

Canadians Elect Warren

Joseph R. Warren, of Toronto, was re-elected president at the recent 34th Annual Conference of the Canadian Warehousemen's Assn. H. H. Perry, Winnipeg, is vice president, and E. P. Carr, Toronto, treasurer. H. Cecil Rhodes, of Toronto, is executive secretary.

Division chairmen include: W. S. Peacock, Regina, household goods; J. R. Williams, Saskatoon, merchandise storage, and Bruce Robinson, Vancouver, Saskatchewan.

Principal speakers at the convention included Rt. Hon. James G. Gardiner, Federal Minister of Agriculture; C. F. Basil-Tippet, past president of CWA, and J. Leo Cook, J. Leo Cook Warehouse Corp., Jersey City, N. J.

—DA—

Underground Freezer

Inland Cold Storage Co. has been organized to build a \$4 million underground freezer warehouse in a rock quarry eight miles west of Kansas City, Mo. It will be able to store more than 2500 carloads of goods at subzero temperatures.

Two New Portland Warehouses



Two additional warehouses have been opened in Portland, Ore., by Holman Transfer Co. Larger of the two, a 4-floor, 80,000-sq ft, all-concrete building, is shown above. A fully palletized operation, it offers office space for clients, burglar and sprinkler protection, a repacking department, and stock accounting and reporting services. The second of the two is a 54,000-sq ft, uni-story, concrete structure with 20-ft ceiling height

Warehouse SPOTLIGHT

MoUVL Meets in Canada

Plans for the further organization and development of Missouri United Van Lines, Ltd., were discussed by the firm's Board of Directors at a meeting held June 22-23 in Toronto, Canada.

Two top officials of United Van Lines, Inc., St. Louis, Mo., led the discussion. They were John K. Gund, of Lakewood, Ohio, chairman of the Board of the Canadian organization and president of UVL, and L. A. Larimore, vice president and comptroller of UVL.

Warehouse Expansion

Wakem & McLaughlin, Chicago, has announced construction of a new warehouse at 4045-73 W. Chicago Ave. in Chicago. The new building is a 120,000-sq ft, one-story, brick construction. It is heated, sprinklered, has unlimited floor load and an 18-ft piling height. Facilities include an off-street truck drive, an 18-truck enclosed loading dock, and a depressed inside rail siding which accommodates 15 cars a day.

A new \$250,000 terminal to service as West Coast headquarters for Allied Van Lines in North Hollywood, Cal., was dedicated June 5. The new terminal provides 100,000 sq ft of office, warehouse, and dormitory space.

Atlanta Service Warehouse, Atlanta, Ga., has opened a new 85,000-sq ft building at 565 Western Ave., N.W. Of brick construction and sprinklered, the new warehouse has an inventory of six fork trucks and 50,000 pallets.

Howard Terminal has added a single-story, 64,000-sq ft, reinforced concrete warehouse building to its previous 52,000-sq ft facilities at 821 N. 10th St., Sacramento, Cal. It is sprinklered throughout, and protected by ADT fire and burglar systems.

—DA—

NARW Safety Awards

Jones Cold Storage Corp., Norfolk, Va.; Merchants Refrigerating Co., Hopkins, Minn.; and Scottsbluff Ice and Storage Co., Scottsbluff, Neb., have been awarded Safety Certificates for outstanding plant safety records by the National Association of Refrigerated Warehouses.

(Please Turn Page)

For Additional Warehouse News, See Chuting the News, Washington DA and Within the Law

Warehouse Spotlight . . .

(Continued from Preceding Page)

United Van Lines Board of Directors



The newly-elected Board of Directors of United Van Lines, Inc., which met recently in St. Louis, included: Seated (l. to r.): Ollie Skellet, Ballard Storage and Transfer Co.; Brainard LaTourette, general counsel, United; W. W. Warren, past-president UVL, Warren Transfer and Storage Co.; J. K. Gund, president of United and also of Lakewood Storage, Inc.; B. D. Bernstein, Quaker Storage Co.; A. J. Hicks, Southside Moving and Storage Co.; W. S. Kutchbach, Atlas Transfer and Storage Co.; W. A. Strauss, Brooks Transfer and Storage; Standing (l. to r.): Horace Humphries, Armstrong Moving and Storage; Carlos Hogue, Albuquerque Warehouse Co.; Jim DiJulio, Lincoln Moving and Storage, Inc.; W. P. Bradley, Jr., Cadillac Storage Co.; Hesse Davidson, Davidson Moving and Storage; Harry Driemeier, Driemeier Storage and Moving Co.; L. A. Larimore, vice-president and controller, UVL; J. Fager, executive vice-president and general manager, United; H. E. Roer, vice-president and sales manager, United; J. O'Brien, O'Brien Delivery Service, Inc.; Russell Danielson, Cater Transfer and Storage Co.; Dewey Hennenburg, Jamesway Moving and Storage Co. Not shown is Elliot H. White, Topeka Transfer and Storage Co.

Men in the Spotlight

John C. Flynn—new vice president in charge of sales, Colonial Warehouse & Colonial Transfer Cos., Miami, Fla.



George J. Cook, founder and owner of George J. Cook, Inc., Buffalo, N. Y.—died recently at the age of 71. He was founder and past president of the Buffalo Van Owners Assn., and past president of the Buffalo Truckers Assn.

M. S. Dodd, owner of Dodd Warehouses, San Francisco, Cal.—died July 4. He was a longtime active member of the California Warehousemen's Assn.

J. Robert Johnston—new secretary and treasurer, North Pier Terminal, Chicago, succeeding E. A. Frey, retired.

Jim F. Arrington, Jr.—named assistant manager, Legal and Traffic Dept., Allied Van Lines, Broadview, Ill.

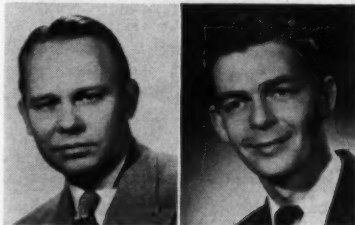


John W. Edwards—appointed vice president and sales manager, Terminal Transfer & Storage Co., Charlotte, N. C.

G. H. Westberg—elected president of Northern Cold Storage and Warehouse Co., Duluth, Minn.

Mary T. Joyce, formerly for many years secretary of Joyce Bros. Storage & Van Co., Chicago—died June 15 at the age of 79.

Clair E. Pierce and **Francis Roderer**—named directors of the Iowa Warehousemen's Assn.



Stanley P. Troxel (left)—named operations manager, North American Van Lines. **Milton B. Chase** (right)—succeeds Troxel as general traffic manager. NAVL also named **Richard D. Schafer** assistant traffic manager; **William E. Hussey**, chief dispatcher, and **Philip J. Sanborn**, manager of the new Flint, Mich., sales office.

Carl Langen—appointed vice president, Republic Carloading & Distributing Co., New York, N. Y.



Kevin T. Levins—elected executive vice president and general manager, Calumet Harbor Terminals, Inc., Chicago.

September 15-19 has been set as the date for the **Annual Convention of the New York State Warehousemen's Assn.**, at Montauk Manor, Montauk, L. I.

Pa. Movers Organize

An organization known as the **Movers Conference of Pennsylvania**, representing Movers exclusively, and separate from the state trucking association, has been formed. **Buell Miller**, of Miller North Broad Storage Co., Philadelphia, is chairman.

Initially the group will seek a minimum rate order on local moving. While in the past many leaders in PMTA have been household goods movers, the feeling has grown among household goods carriers that their problems have been "lost in the shuffle." About 100 carriers attended the organization meeting.

Newest members of **Affiliated Warehouse Cos.** are: **Fuchs of Washington**, Washington, D. C.; **Fuchs Transfer Co.**, Baltimore, Md., and **Milwaukee Cold Storage Co.** and **Kro-Flite Cartage Co.**, Milwaukee, Wis.

In the Movies

The role of the mover and warehouseman in American industry will be featured by the **National Association of Manufacturers** in a documentary film this fall in the Association's television program, "Industry on Parade."

National Ice and Cold Storage Co. of California has moved its executive offices to 55 Division St., San Francisco, Cal.

and Firms are Arranged Alphabetically

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Executive offices: 444 Lake Shore Drive, Chicago 11 — Superior 7-5606

Within the Law . . .

(Continued from Page 62)

to read various insurance policies and know exactly what protection is afforded by respective policies. This is so because various insurance policies have different clauses, and the courts always hold that the protection afforded by an insurance policy will be strictly interpreted. Not only does this higher court decision illustrate that clauses in insurance policies absolutely define the legal rights of the insurance company and the holder of a policy, but also this decision proves that the clauses in an insurance policy define the liabilities existing between respective insurance companies.

For illustration in *H — A — & I — Co. v. A — E — s' I — Co.*, 200 Fed. (2d) 5, the testimony showed facts as follows: The *B — C — Co.* held an insurance policy issued by the *A — E — s' I — Co.* This policy contained a clause covering liability "sustained by any person or persons, arising out of the ownership, maintenance or use of any automobile". In this policy the word "Insured" was defined as including the *C — Co.* and also "any person"

while using an automobile owned by the *C — Co.* and with its permission. This latter clause is important because a policy without it gives no protection to an automobile owner who rents or loans it to another person.

The *C — Co.* rented a truck and trailer to *C — E — Co.* for transportation of a load from Boston to Chicago. The *C — E —*, which was operating its trucking line under a certificate of public convenience and necessity granted by the ICC applied for and was issued an insurance policy from the *H — A — & I — Co.* which insured it against liability for bodily injury with maximum liability of \$100,000 for each person and \$200,000 for each accident. The policy expressly covered "all licensed commercial automobiles owned, hired or used" by *C — E —* in its motor transportation service. This *H —* policy also expressly covered "the owner or operator" of vehicles hired by *C — E —* "whether owned or operated by an independent contractor or by an employee" of *C — E —* while such

vehicles were operated "in the motor transportation service of" *C — E —*. Hence these various clauses in its insurance policy gave the *C — E — Co.* adequate protection when operating vehicles rented or leased from the *C — Co.*

An automobile driver, named *M —*, was injured in a collision between his automobile in which he was riding and the motor truck operated by the express company. He asked for \$75,000 damages.

The United States District Court held that the insurance furnished by *H — A — & I — Co.* under its policy to *C — E —* was valid insurance covering the operation of the equipment. After this judgment the *H — A — & I — Co.* settled the suit by payment to *M —* of a total sum of \$13,500.

Then the *H — A — & I — Co.* sued the *A — E — Insurance Co.* in an attempt to secure a contribution towards the settlement paid to *M —* and the expenses incurred in defending the suit.

During the trial testimony was given that the *A — E — Insurance Co.*'s insurance policy contained a clause which provided that if there was "other valid insurance" protecting the injured from such liability the policy of the *A — E — Insurance Co.* should be null and void except

(Please Turn to Page 74)

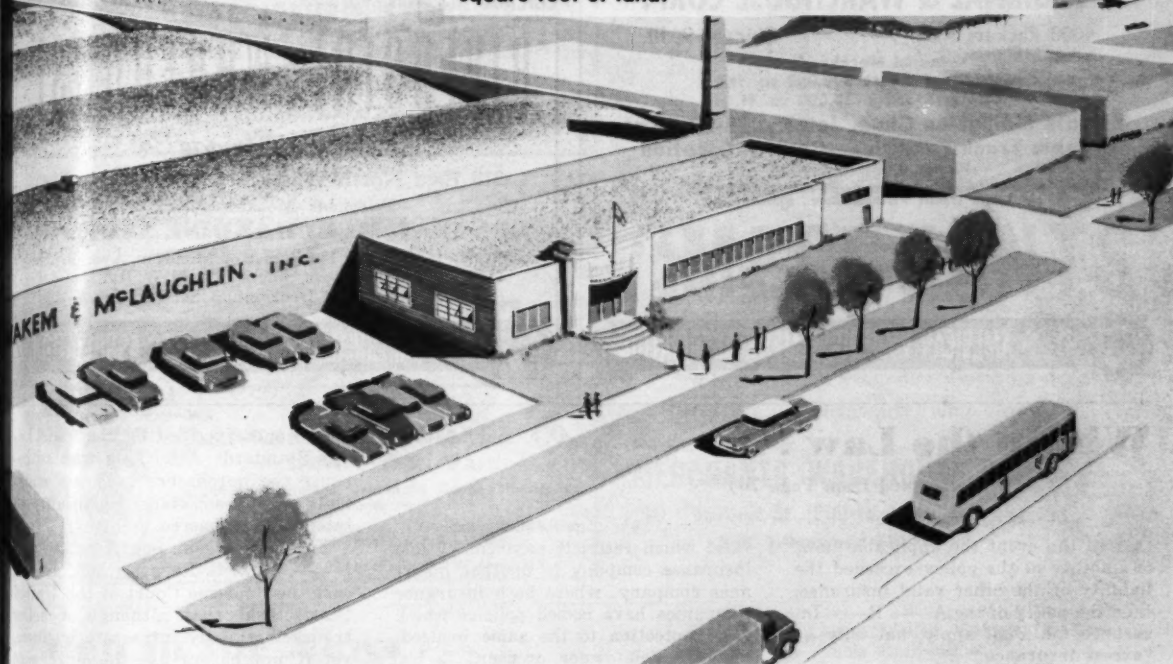
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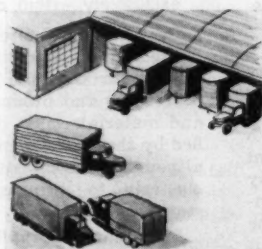
The building was actually constructed to customer specifications—single story, brick walls throughout; completely heated and sprinklered; an unlimited floor load with 18 foot pile height; lowest insurance rates; 120,000 square feet of storage space on 243,000 square feet of land.



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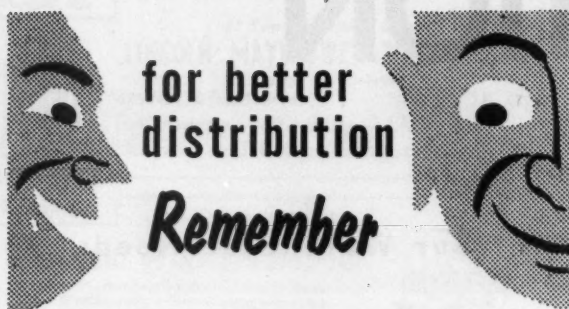
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Within the Law . . .

(Continued from Page 70)

that in the event the applicable limit of liability of the policy exceeded the liability of the other valid insurance, then the policy of the A—E—Insurance Co. shall apply, but only as "excess insurance."

In view of this clause the higher court held that the A—E—Insurance Co. need not pay H—A— & I—Co. any part of the \$13,500 paid to M—. This is so because the policy issued by the A—E—Insurance Co. contained a clause that limited its liability for bodily injury to \$50,000 on each person and to \$100,000 for each accident. The damage award of \$13,500 to M— did not exceed the amount of insurance held under the policy by the C—Co. Hence the above mentioned clause in the policy of the A—E—Insurance Co. saved it from paying any of the loss paid out by the H—A— & I—Co.

So, therefore, this unusual higher court decision upholds these important points of law: An insurance policy is valid which contains a clause affording protection when the automobile is rented or leased to another. A clause is valid which covers vehicles rented or leased by an insured. A clause is

valid which restricts payment by one insurance company to another insurance company, where both insurance companies have issued policies which give protection to the same insured, motor vehicle owner, or user.

Does Fair Labor Standards Act apply to goods sold exclusively within a state?

Recently the Supreme Court of the United States established new law to the effect that all manufacturers, processors and producers of products and materials must pay wages specified by the Fair Labor Standards Act, although the materials are sold exclusively to purchasers within the state.

For example, in T— v. H— Brothers, 73 S. C. Reporter 568, it was shown that a manufacturer sells materials to common carriers, railroads, highway departments and airports.

The Supreme Court of the United States held that although the deliveries of the materials were made to purchasers within the state, yet the employees of the manufacturer must be

paid wages specified by the Fair Labor Standards Act. This was so because the purchasers used the materials in different states which affected interstate commerce.

For comparison, see A— Co. v. D—, 73 S. C. Reporter 565. In this case the Supreme Court of the United States held that although a seller transacts strictly intrastate business, yet if purchasers use the purchased materials in interstate commerce the seller is within the scope of the Fair Labor Standards Act.

(Resume Reading on Page 63)

Rubberized Chemical Tanks



Goodyear Rubberizes Six Tanks To Carry Chemicals: Dow Chemical has chartered this Marine Transport Line vessel equipped with six tanks 15 ft in dia and 41 ft deep. Capacity is approximately 240,000 gal. Two similar storage tanks are being lined at Newark, N. J., to receive the chemicals

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and Firms are Arranged Alphabetically

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INC. 1902



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LANCASTER, PA.

INC. 1906



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Manufacturers' Distributors, Carload Distribution,
Local and Long Distance Moving
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Member of A.W.A.—F.W.A.

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Meadow and Wolf Sts. Philadelphia 48

Complete Warehousing Service for Storage and Distribu-
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Private Siding B. & O. • Pool Car Distribution
Low Insurance Rates



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to better serve your distributional needs in
the teeming Delaware Valley region.

MERCHANTS WAREHOUSE CO.

10 Chestnut St., Philadelphia 6, Pa.
Tel. LOMBARD 3-8070



Men in the News . . .

(Continued from Page 14)

a member of the Board of Atlantic
Terminals & Warehouses, Charlotte,
and Highway Service, Inc., Atlanta.

Harry G. Parker, traffic representa-
tive, Branch Motor Express—died in
Philadelphia June 21.

Glen M. Hearin—named manager
of publicity, American Trucking As-
sociations, Inc.

Max L. Straus-
ser—named man-
ager of Lease
Sales Div., White
Motor Co., Cleve-
land, O.



Douglas S. Brown—named assistant
controller, Fruehauf Trailer Co., De-
troit, Mich.

Daniel E. Baird, Jr.—appointed
manager of Knoxville, Tenn., office,
North American Van Lines, Inc.

Thomas F. Robertson — appointed
managing director, Irregular Route
Common Carrier Conference, ATA.

Rail

Burton B. Behling—joined the staff
of the Bureau of Railway Economics,
Association of American Railroads.

Phillip H. Galloway—named mana-
ger of mail, baggage and express,
Illinois Central Railroad.

J. W. Tipton—new general freight
traffic manager, Frisco Railway.

G. E. Wilson, manager of stores for
the Reading Co.—elected chairman,
Purchases and Stores Div., AAR.

Harry C. Vom Berg—appointed

comptroller, Chicago & Eastern Illi-
nois Railroad.

Water

Capt. Frank Kenneth Johnson,
USCG—designated captain of the Port
of New York.



Oath of office is administered to
Bernard J. Caughlin (left) general
manager of Los Angeles Harbor by
City Clerk Walter C. Peterson. Caugh-
lin had been acting general manager
for the past two years.

(Resume Reading on Page 17)

"PENNSYLVANIA" is your spot in PHILADELPHIA

For efficient, economical distribution in the Philadelphia area, choose from among the 22 big, modern "Pennsylvania" warehouses. Here are over 1,000,000 square feet of desirable free and bonded storage area.

Painstaking personnel, using specialized equipment, handle even difficult commodities with speed and safety. Here are superb rail and highway facilities—one- to 10-ton trucks for prompt store-door deliveries. Low insurance rates. Write for full details about money-saving "Pennsylvania" service and storage of goods in any quantities.

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STORAGE DISTRIBUTION



In Philadelphia you can solve in jig-time the problems of storage and distribution. You merely get in touch with Terminal Warehouse Co.

Behind this one name are: 13 modern warehouses; 3,000,000 sq. ft. of storage space; U.S. Customs bonded space; efficient storing and moving of household goods; fast handling of bulk or packaged goods; direct connections with the Pennsylvania and Reading Railroads; low switching rates to and from Delaware River piers; pool-car service; storage-in-transit; facilities for receiving shipments by truck; mechanized handling equipment; fast store-door delivery by our own truck fleet. Write for further information.

Represented by *DISTRIBUTION SERVICE, INC.*, an association of good warehouses located at strategic centers.

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Merchandise Storage Storage in Transit
Direct Sidings-Penna. R.R. and Reading R.R.
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Represented by Associated Warehouses, Inc.
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COMPLETE TRUCKING FACILITIES
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Letters to the Editor . . .

(Continued from Page 8)

of delivery of the merchandise returned to the warehouseman. Conversely, a non-negotiable receipt is subject to correction of errors, and mistakes. Of course, the warehouseman is legally obligated to prove errors in non-negotiable receipts, otherwise he will be held liable.

For example, in *S— vs. S—*, 257 Pac. 625, it was shown that the purchaser of a large quantity of merchandise placed them in a warehouse for storage. As each truck-load reached the warehouse, a receipt was issued for the number of boxes contained in the load and the warehouse receipts were delivered to the drivers. Later it was discovered that approximately 650 boxes of the merchandise called for in the receipts were missing.

In subsequent litigation the warehouseman contended that the discrepancy was the result of a mistake in issuing warehouse receipts. Nevertheless, as the warehouseman failed to prove his contention, the higher court held:

"The receipts are, of course, outstanding and they furnish prima facie evidence that the number of boxes called for by them was actually delivered. The oral evidence of the parties is in direct conflict, and the attempt of checking from independent sources throws no certain light on the controversy."

In other words, this court held that the warehouseman is liable on the actually issued receipts unless he introduces convincing evidence to prove that receipts were issued due to errors.—Leo T. Parker, DA Legal Consultant.

Government Space

To The Editor:

In your May issue, an item on Page 16 states that the GSA is seeking more commercial warehousing space. Could you give us more information in regard to this, so that way may know what type of warehousing and possible locations they are seeking?

C. M. Rice

Ward Trucking Corp.
Altoona, Pa.

Carrier Directory . . .

Next month's DA will be a special Transportation Issue. In addition to a Reference Section and carrier application stories, it will include a Motor Carrier Directory, listing equipment, facilities, and terminal points of some 1600 truck lines.

General Service Administration is still interested in commercial space in certain areas and advises the following action: Provide GSA with data on the tune storage space available, describing its location and the rate or rates you would charge. Be sure to include such technical information as floor load limits, fire prevention facilities, and protective devices. Send details to: Joseph Salisbury, Director, Storage and Transportation Div., Emergency Procurement Service, GSA, Room 5308, 7th & D Sts., S. W., Washington 25, D. C.—Ed.

Dirty Car Problem

To The Editor:

I have had an opportunity to read both the April and June articles on DISTRIBUTION AGE Dirty Car Survey. Frankly, it only confirms my conclusions that we all recognize the problem that no one, even the carriers, have any idea as to its magnitude. In addition, industry and carrier alike realize that something must be done and just how to proceed is one of the things that I hope the Shippers Advisory Board can accomplish in the not too distant future.

It certainly is not a problem to be dealt with hastily by recommending additional regulation or penalty charges. At least that should not be the result until such a time as all other alternatives have been exhausted. Of course, we do not know

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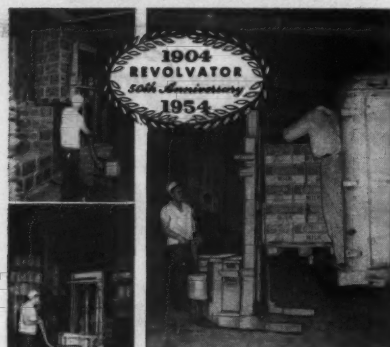
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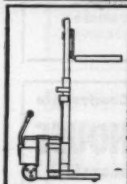
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what these alternatives are until a research is made with a report and, I hope, following that a constructive program.

I fully intended to mention your survey in my report at the Milwaukee meeting of the Midwest Shippers Advisory Board for it proves conclusively that responsible industrial traffic men are very much concerned with the expense of cleaning cars, the expense of the additional switching and, should there ever be another car shortage, how the dirty car can contribute to that shortage by lost car days.

L. E. Olson
Assistant Director of Traffic
Great Lakes Carbon Corp.
New York, N. Y.

The survey also confirmed our suspicion that the industrial traffic manager is considerably more concerned over the dirty car problem than is generally realized. The fact that most TM's prefer to have their own people clean most of the dirty cars, rather than subject themselves to the trouble and delay incident to reporting and returning dirties, indicates that traffic management has a serious interest in the program.—Ed.

(Resume Reading on Page 11)

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